

# *Aristotle on Memory and Recollection*

TEXT, TRANSLATION,  
INTERPRETATION,  
AND RECEPTION IN  
WESTERN SCHOLASTICISM

DAVID BLOCH

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## Aristotle on Memory and Recollection

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VOLUME 110

# Aristotle on Memory and Recollection

Text, Translation,  
Interpretation, and Reception  
in Western Scholasticism

*By*  
David Bloch



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*For Birgitte*



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Copenhagen, January 2007  
David Bloch



## PREFACE

This book was originally a doctoral dissertation submitted to the Faculty of Humanities, University of Copenhagen, in 2006 and publicly defended in the same year. The text has been revised on the basis of the comments and criticism that I have received since then, but the argument is basically the same.

The different parts of the book are related to each other because of the simple fact that Aristotle's *De memoria et reminiscencia* is in some sense the main topic treated in all of them. The most basic and general hypothesis of the book is that the *De memoria et reminiscencia* is a very important Aristotelian text: not only does it discuss subjects that are still philosophically interesting, and does so in ways that will prove stimulating and fruitful to us if properly analysed; but it also constitutes an excellent key to understanding some of the most basic techniques in Aristotelian philosophy, in particular, concerning philosophical methodology. Thus, I have undertaken an extensive analysis of this small treatise from a number of different angles.

The book has three major parts: (1) a new critical edition of Aristotle's *De memoria et reminiscencia*, accompanied by an English translation and a commentary concerned solely with textual matters; (2) an essay on Aristotle's theories of memory and recollection, and (3) an essay on the tradition of the Aristotelian theories, focusing attention specifically on the Latin medieval tradition.

The need for a new critical edition of *De memoria* is argued in the Introduction to the Critical Edition below in which I have also described the principles of the edition and the textual evidence. Studies of the manuscript tradition and the secondary evidence have shown that the previous editions have not established the manuscript foundation with the degree of precision that can be reached. And furthermore, the existing editions do not have clear principles for choosing between the variant readings and for the use of secondary evidence. Even their principles for the use of conjectural criticism are often very unclear. Therefore, the present edition differs in a number of ways from all the previous ones.

The essay on Aristotle's theories of memory and recollection provides a new interpretation of the Aristotelian theories. In particular, it is argued that a careful reading of the text shows that Aristotle's conception of memory is somewhat different from ours. At the end of chapter 1 of the treatise Aristotle defines memory as a rather narrow concept, *viz.* as the actual viewing of images present to the attention of the remembering subject. I argue that this is really all that Aristotle's concept of memory involves, and this claim is substantiated by the text itself and other Aristotelian writings as well as by terminological evidence concerning the relevant "memory words". Thus, this reading of the *De memoria et reminiscencia* does not support the scholarly *opinio communis* that Aristotle's theories of memory and recollection are basically and to a large extent like ours, or at least not too different. The discussion is intended as a close reading of Aristotle's text, and therefore there is only little discussion of other ancient theories in the essay. In particular, one will look in vain for a thorough exposition and/or analysis of Plato's theories of memory and recollection. These are important in their own right, and of course they also provide the immediate background for Aristotle's thoughts on the issues involved, but since the main focus of my investigation is Aristotle and Aristotelian theories, I have refrained from analyses of Plato. Only in particular instances have I used Plato to illuminate or explain a point in Aristotle's text or theory. On the other hand, the essay devotes a number of pages to some of the best known interpretations in the field, in particular, Richard Sorabji's and Julia Annas', and it also attempts to demonstrate the relevance of Aristotle's theories to a 21st century reader.

The essay on the reception of the Aristotelian theories in Western medieval scholasticism examines the later history of the Aristotelian theories. The centre of attention is 12th/13th centuries Western thoughts on memory and recollection, that is, the theories found in Latin scholasticism. These are particularly interesting, because their theories were developed above all on the basis of close readings of Aristotle, although the final results had, of course, to fit their conception of the world and philosophy in general. Furthermore, little work has been done concerning many of these scholastic treatises of this period. First, the essay looks into the preconditions of the scholastic theories, that is (in addition to Aristotle's), the theories of Augustine, the Arab thinkers (Avicenna and Averroes in particular), and of some thinkers from the early years of the Aristotelian renaissance (Dominicus Gundissalinus, John Blund and two anonymous treatises). Then, the sophisticated the-

ories of some of the most important philosophical figures of the 13th and early 14th centuries are interpreted and analysed. It is argued that none of these thinkers adhered closely to Aristotle's theory, even when they were trying to interpret the *De memoria et reminiscencia*. The reasons for this are probably many, but it is argued that the main reason is probably the fact that Aristotle's narrow theory did not provide the schoolmen with the conceptual foundation they needed. Thus, in Latin theories of memory the more elaborate theories of Augustine and the Arab thinkers came to play an even bigger role than they usually did in philosophical matters of this kind, while the Aristotelian flavour on the other hand is much less pronounced compared to other philosophical areas. In general, one might say that the Latin medieval concepts of memory evolved through the schoolmen's efforts to interpret and harmonise the theories of different philosophical authorities (including, of course, Aristotle), and that this produced new and interesting theories. Still, a major advance towards a modern conception of memory is not, apparently, seen before the beginning of the 14th century in Duns Scotus' theory, and he also uses Aristotle as his primary source.

The present study should, then, be relevant not only to anyone interested in Aristotle's and later Aristotelian theories of memory and recollection but also to those working on conceptual problems of memory, and even to scholars and philosophers interested in Aristotelian philosophical methodology.



## CHAPTER ONE

### INTRODUCTION TO THE CRITICAL EDITION

#### *The Edition*

The textual tradition of the *Parva naturalia* has been the subject of several investigations throughout the 20th century. Biehl<sup>1</sup> still used the same manuscripts as Bekker, but during the next 65 years the whole tradition was examined twice by R. Mugnier and P. Siwek, and A. Förster made very thorough collations of the manuscripts that he used for his edition of the *De sensu* and the *De memoria*. Mention should also be made of H.J. Drossaart Lulofs' editions of the *De somno*, the *De insomniis*, and the *De divinatione per somnum*.<sup>2</sup> Since Siwek's critical edition in 1963<sup>3</sup> no new edition has been published, but there have appeared quite a few relevant manuscript studies, including D. Harlfinger's monumental study of the manuscripts of the *De lineis insecabilibus* and A. Escobar's study of the manuscript tradition of the *De insomniis*.<sup>4</sup> Furthermore, P. Gatsioufa is currently examining the manuscript tradition of the *De sensu*.<sup>5</sup>

For all this, I found that earlier scholarship had left out important issues and valuable material, even regarding some of the well-known manuscripts, and I therefore decided to review all the relevant material. This investigation included (1) the modern critical editions; (2) the manuscripts written between the 10th and the 14th centuries; (3) the medieval Latin translations; (4) the commentary by Michael of Ephesos, the paraphrases by Sophonias and Gennadios Scholarios, the hitherto unpublished paraphrase by Theodoros Metochites<sup>6</sup> and the,

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<sup>1</sup> Biehl (1898).

<sup>2</sup> Drossaart Lulofs (1943) and Drossaart Lulofs (1947).

<sup>3</sup> Siwek (1963).

<sup>4</sup> Harlfinger (1971); Escobar (1990).

<sup>5</sup> Unfortunately, it was not possible to arrange for any collaboration between myself and P. Gatsioufa.

<sup>6</sup> But see now Bloch (2005).



also unpublished, paraphrase with accompanying comments by Georgios Pachymeres.<sup>7</sup>

*Modern Editions of the De Memoria*

Four different critical editions of the *De memoria* were produced during the 20th century.<sup>8</sup> The first is the somewhat neglected edition by Förster<sup>9</sup> on which W.D. Ross based substantial parts of his text. Förster has used the same seven manuscripts as Bekker and Biehl, but he excludes Y on the grounds that it is a copy of E.<sup>10</sup> In addition, he made a very thorough collation of Michael of Ephesos. However, Förster has not examined the value of Michael of Ephesos as a textual witness, and, more importantly, his manuscript foundation does not allow him to establish the stemmatic relationships with precision. Furthermore, while making some textual emendations himself, he has not carefully examined the contributions made by earlier scholars. And finally, he does not state his procedure in dealing with the manuscripts; his edition is based on an eclectic and somewhat idiosyncratic approach.

Mugnier conducted comprehensive examinations of the entire manuscript tradition, but he includes only the seven manuscripts used by Bekker and Biehl when constituting the text.<sup>11</sup> His edition, as he himself admits,<sup>12</sup> is very similar to Biehl's. He relies especially on the manuscript E, even though P. Wendland and H.J. Drossaart Lulofs had already shown that the other branch of the tradition (my  $\beta$ ) cannot be neglected.<sup>13</sup> Mugnier's reason for this editorial decision (namely, that E can be seen to be the prototype of the entire branch while no similar prototype of the other branch is extant) is, in my opinion, philologically wrong. It is also strange that he did not include more manuscripts, since he had examined the entire tradition. For a text of this complexity, his critical apparatus is extremely meagre; in particular, he very

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<sup>7</sup> An edition by C. Oikonomakos of Pachymeres' text is forthcoming.

<sup>8</sup> In addition, G.R.T. Ross (1973<sup>2</sup>) contains a semi-critical text, that is, the text of Biehl (1898) with critical notes and a few textual suggestions by the author.

<sup>9</sup> Förster (1942).

<sup>10</sup> Rightly, I believe, cf. Bloch (2002), Bloch (forthcoming) and the section on the  $\alpha$  family below.

<sup>11</sup> Mugnier (1965<sup>2</sup>). For the manuscript studies, cf. Mugnier (1937) and Mugnier (1952).

<sup>12</sup> Mugnier (1965<sup>2</sup>) 16.

<sup>13</sup> Wendland (1902); Drossaart Lulofs (1943); Drossaart Lulofs (1947).

rarely cites scholarly work on the text and does not himself add critically to the text either. Finally, his use of Michael of Ephesos, who is cited in the apparatus simply as “Mich”, is problematic, since it makes a great difference whether the reading is a lemma, a citation, or a paraphrase.

Ross<sup>14</sup> collated only X when he established the text of the *De memoria*; for the remaining manuscripts he used the collations of Bekker and Förster. Furthermore, he generally accepts Mugnier’s reconstructions of the manuscript tradition, which, as I have shown elsewhere,<sup>15</sup> cannot be trusted. Thus, Ross is from the beginning severely hampered by his manuscript foundation that prevents him from establishing a proper *stemma codicum*. This I believe to be the biggest problem concerning Ross’ edition, because it provides him with the justification of an entirely eclectic approach without regard to whether the archetypal reading can be established. It is also problematic that he has greater trust in the manuscript P than can be justified by its text and age. (At the time of Ross’ edition, P was thought to be a 12th century manuscript.) On the positive side, Ross has carefully evaluated all previous scholarly work on the text, and he himself makes several interesting and convincing conjectures.

Siwek<sup>16</sup> has collated all extant manuscripts of the *Parva naturalia* but reasonably uses only the older ones in his edition. He based the edition on his *prima classis* (my β). Siwek’s edition was generally well received with only a few exceptions among the reviewers,<sup>17</sup> and it has recently been used as the foundation of a German translation of the *De insomniis* and the *De divinatione per somnum*.<sup>18</sup> In my opinion, there are, however, two major problems with his edition: his stemmatic reconstruction and his editorial procedure. Martha Nussbaum called Siwek’s stemmatic analyses “often labyrinthine and unconvincing”, and even if this is too harsh, they are certainly inconclusive.<sup>19</sup> Siwek establishes seven *familiae* (α, β, γ, δ, ε, ζ, η) and divides them into *prima classis* (αβγδε = my β)

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<sup>14</sup> Ross (1955).

<sup>15</sup> Bloch (forthcoming).

<sup>16</sup> Siwek (1963). For the manuscript studies, cf. Siwek (1961).

<sup>17</sup> For a forceful criticism of the edition, cf. the reviews by Drossaart Lulofs (1965) & Lloyd (1965), and the reply in Siwek (1966).

<sup>18</sup> van der Eijk (1994). But the *De memoria* translation by King (2004) in the same series is based on Ross (1955).

<sup>19</sup> Nussbaum (1976) 119n22. King (2004) 59–62 seems to have accepted Siwek’s conclusions without consulting the later and much more careful studies by Harlfinger (1971) and Escobar (1990).

and *secunda classis* ( $\xi\eta = \text{my } \alpha$ ). But since he does not try to establish the relationships between the different *familiae* of a *classis*, he can in principle end up with five different readings from the *prima classis* and two from *secunda classis*, all with equal stemmatic authority. Thus, on his reconstruction of the stemmatic relationships we will almost never reach the archetypal reading when the manuscripts disagree. Seeing that a single, coherent *stemma* can, in fact, be established, the predicate “inconclusive” seems fair. On the editorial side, Siwek is generally hostile towards textual criticism and adheres closely to the manuscripts. But even if a cautious approach is reasonable in textual criticism, emendations must be made when the manuscripts yields no or non-sense. Siwek often defends inferior readings.<sup>20</sup> His critical apparatus is comprehensive, but his principles for printing variant readings are unclear. For instance, he is very inconsistent in recording readings from N and v, even though both are printed in bold types in his preface, which is Siwek’s way of showing that they are used as part of the foundation of the edition.<sup>21</sup> It could well be argued that neither of these manuscripts should be cited, since they are both extremely corrupt, but on Siwek’s stemmatic reconstructions N is the best representative of an independent branch of the *prima classis*. Finally, like Mugnier, he uses Michael of Ephesos but does not state whether the reading is a lemma, a citation or a paraphrase.

In conclusion, all existing editions contain some faults that can be somewhat remedied. This was my original reason for initiating editorial work on the text.

### *The Manuscripts*

We possess 18 extant manuscripts ranging from the 10th to the 14th centuries:

- $\alpha$ . EYbVC<sup>c</sup>Mi
- $\beta$ . LH<sup>a</sup>X UO<sup>d</sup>S NvZ<sup>a</sup> m
- $\varrho$ . LH<sup>a</sup>X
- $\theta$ . UO<sup>d</sup>S NvZ<sup>a</sup>
- $\mu$ . UO<sup>d</sup>S
- $\iota$ . NvZ<sup>a</sup>

<sup>20</sup> E.g. Siwek (1963) 151m12 (*ad Mem.* 449b20); Siwek (1963) 159n64 (*ad Mem.* 451b14–15).

<sup>21</sup> Siwek (1963) XXI.

E	Par. gr. 1853. s. x.
Y	Vat. gr. 261. s. xiii–xiv.
b	Par. gr. 1859. s. xiv.
V	Vat. gr. 266. s. xiii–xiv.
C <sup>c</sup>	Par. Suppl. gr. 314. s. xiv.
M	Urb. gr. 37. s. xiv.
i	Par. gr. 2032. s. xiv.
L	Vat. gr. 253. s. xiv.
H <sup>a</sup>	Marc. gr. Z 214. s. xiii–xiv.
X	Ambr. 435, H 50 Sup. s. xii–xiii.
U	Vat. gr. 260. s. xii.
O <sup>d</sup>	Marc. gr. Z 209. s. xii–xiii.
S	Laur. Plut. 81.1. s. xii–xiii.
N	Vat. gr. 258. s. xiii–xiv.
v	Laur. Plut. 87.20. s. xiv.
Z <sup>a</sup>	Laur. Plut. 87.21. s. xiv.
m	Par. gr. 1921. s. xiv.
P	Vat. gr. 1339. s. xiv.

The collective sigla ( $\alpha$ ,  $\beta$ ,  $\varrho$ ,  $\vartheta$ ,  $\mu$ ,  $\iota$ ) comprise all manuscripts except P, which, even though it does belong to  $\beta$ , is a rather special case.

### *Stemmatic Considerations and Conclusions*

Through these manuscripts we possess evidence from three independent textual traditions:  $\alpha$ ,  $\beta$  and  $\gamma$ . Of these, the evidence from  $\alpha$  is easy to access, the evidence from  $\beta$  is more difficult to obtain, but most often it is possible, and the evidence from  $\gamma$  is rarely discernible. Therefore,  $\gamma$  can be disregarded when discussing the basis of the text. There is no general agreement among scholars on which tradition is to be preferred, but it is certain that both  $\alpha$  and  $\beta$  do at times preserve the correct reading against the other tradition. The following should be read with the stemma at hand.<sup>22</sup> Furthermore, it should be noted that, although I have focused particular attention on the *De memoria*, I have also used collations of the *De sensu* in order to establish the stemmatic relationships more accurately. The *De memoria* usually follows immediately after the *De sensu* in the manuscripts, and I have not found a sin-

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<sup>22</sup> See the “Stemma Codicum” (the illustration at the inside of the back cover).

gle manuscript in which there is a clear difference of textual tradition between these two texts.<sup>23</sup>

The divisions into families, branches and sub-branches are usually based on what I have considered a sufficiently large number of agreements of two or more manuscripts against the rest of the tradition. In most cases this evidence can be supported by more specific observations concerning readings, *lacunae*, *scholia* etc. The bulk of this evidence must, however, be gathered from my forthcoming article.<sup>24</sup> In this introduction I merely set forth the stemmatic relationships, sometimes supported by a few additional observations.<sup>25</sup>

### The $\alpha$ , $\beta$ and $\gamma$ Traditions

The division of the tradition into  $\alpha$ ,  $\beta$  and  $\gamma$  is well recognised, although not all scholars will agree that  $\gamma$  (represented only by P) constitutes a separate tradition. The division is based on a number of passages in which two large groups of manuscripts can be seen to hold two different readings. The following constitutes only a few of the examples. These could easily be multiplied several times, but they are good representative examples of the evidence on which the division into  $\alpha$  and  $\beta$  is based:

440a24. ἀκίνητον  $\beta$  : κινήτὸν  $\alpha$ .

442b23. τῶν χυμῶν αἴσθησιν ποιήσει  $\beta$  : ἄν ποιήσειεν αἴσθησιν  $\alpha$ .

444b11. ποιούσι πρὸς τὸ μέλι  $\beta$  : *om.*  $\alpha$ .

449b17. ὅτε *et* τυγχάνει  $\alpha$  : *om.*  $\beta$ .

450a4. ὁ νοῶν  $\beta$  : ὀνομάζομεν  $\alpha$ .

451b15. ἑτέρους  $\beta$  : ἄλλους  $\alpha$ .

This division constitutes the backbone of my textual reconstruction. Therefore the secure establishing of the readings of the respective traditions is the first important task of the editor.

<sup>23</sup> However, in the middle of the *De sensu* (approximately at 442b26) quite a few manuscripts begin using a different textual tradition than the one they started out with (see more below).

<sup>24</sup> Bloch (forthcoming).

<sup>25</sup> Thus, for an elaborate argument in favour of my entire reconstruction, cf. Bloch (forthcoming). The readings of all manuscripts for both the *De sensu* and the *De memoria* are presented in Bloch (2004).

## The α Family

The readings of α are easily established. E is the ancestor of all other manuscripts of α, and therefore it is the sole witness with textual authority from this branch of the tradition. Y (as a direct copy)<sup>26</sup> and V (through an intermediate copy δ) both stem from E, and their readings are not textually relevant; they agree in reading with E with stunning regularity, and neither of them ever disagrees spectacularly with E. V has some disagreements, but most of them are peculiar errors due to the carelessness of the scribe, and the rest can be explained by the text in E.

b is a relatively uninteresting direct copy of Y, and it is never cited as a textual witness. C<sup>c</sup>Mi are also directly descended from E, with at least one intermediate copy (ε), but since the facts are more difficult to discern here and the case disputed, the readings of this branch are cited in the apparatus. These three manuscripts contain quite a few peculiar readings and also a number of agreements with the β tradition. I have carefully examined all the peculiar readings of these three mss. for both the *De sensu* and the *De memoria*, and I have found only two readings that I believe to be correct:<sup>27</sup>

450a13. τοῦ νοῦ μὲν C<sup>c</sup>Mi : τοῦ νοητικοῦ P : τοῦ νοουμένου *cell*.<sup>28</sup>

453a1. ὁδήποτε ἐποίησεν C<sup>c</sup>Mi : ὅτι μέντοι ποτὲ ἐποίησεν ρμNm : ὁδήποτε ποιῆσαι EYV<sup>1</sup> : ὅτι μέντοι ποτὲ ποιῆσαι b<sup>2</sup> : ὅτι μέντοι ἐποίησε ποτὲ V<sup>2</sup>(*in marg.*) : ὅτε μέντοι ποτὲ ἐποίησεν vZ<sup>a</sup> : ὅτοι μέντοι ποτὲ ἐποίησεν P.

However, the latter could well be a reading that originated through the use of the β tradition; C<sup>c</sup>Mi have visibly been contaminated by this tradition in quite a few passages. The first reading must, then, be due to conjecture. It should be noted that it is a peculiar characteristic of these manuscripts to insert single explanatory words, such as particles, connectives, etc., in order to structuralise difficult text, and therefore

<sup>26</sup> For the evidence in favour of this claim, which will be contested by some scholars, cf. Bloch (2002). In particular, in some passages of the *De sensu*, the textual appearance of E easily explains substantial omissions in Y (446b3–4; 448a20–21) and a very peculiar error that Y made in 446a27 (τὸν μεταξὺ E : τὸν πεδοκλείς μεταξὺ Y). The scribe did, however, correct his own error by erasing πεδοκλείς.

<sup>27</sup> For a few other readings from both the *De sensu* and the *De memoria* that might perhaps be considered interesting, cf. 438b27, 445a12 and 451b2.

<sup>28</sup> However, Mugnier (1965<sup>2</sup>) and King (2004) prefer the reading of P.

the reading in 450a13 would be a natural emendation.<sup>29</sup> Since they contain no substantial, independent readings, I believe that they must stem from E. Still, all the readings will be provided, but since M and i are directly descended from C<sup>c</sup>, their individual errors need not be cited.

### The β Family

The readings of β can be established through a more complicated process. The tradition is divided into two major branches (ϱ and θ); again this division is based on a number of significant differences between two groups of manuscripts. In particular, there is a long passage in the *De sensu*,<sup>30</sup> for which all θ manuscripts have only *τί γάρ ἐστιν*.

The best, that is, the most independent witness, is ϱ, which does not seem to have suffered greatly from contamination. L and H<sup>a</sup> are the most important witnesses for the readings of ϱ. They contain few peculiar errors.<sup>31</sup> Agreements of L and H<sup>a</sup> usually provide the reading of ϱ, and the agreement of one of them with X is likely to do so. These three manuscripts stem directly from ϱ. The support of m might also be indicative, though nothing can be based on (the support of) this manuscript alone, since it is highly contaminated from several parts of the textual tradition. The readings of L, H<sup>a</sup>, and X are all cited in the apparatus.

The other major branch of β, *viz.* θ, divides first into two minor branches: one comprising μ, and another comprising ι (and partly m). Complete agreement between all the manuscripts involved is almost never found because of the extensive corruption and contamination in the ι branch. However, the split is clearly seen because of the great number of agreements of UO<sup>d</sup>S (μ).

μ constitutes by far the better part of θ. O<sup>d</sup>S (ξ) and U all originate from μ, and they are of approximately equal value, although ξ has been slightly contaminated. Generally, agreements of ξ with α alone cannot be accepted as conclusive proof that a reading is archetypal, since the α tradition has apparently contaminated ξ. Still, both manuscripts of this group are used, and all their readings have been

<sup>29</sup> For some further examples of the procedure, cf. 449b21, 450a25, 450b9, 450b22, 450b31, 451a4, 451b17, 452a3, 453a3.

<sup>30</sup> *Sens.* 437b15–21.

<sup>31</sup> I have counted 4 in L and 8 in H<sup>a</sup>.

cited.<sup>32</sup> U does not appear to have been very contaminated, but it must be noticed that scholia containing parts of Alexander of Aphrodisias' commentary are present in the *De sensu*-part of the manuscript and have made their mark on more than one occasion. Still, one passage clearly illustrates the independence of U. In 451b14–15, the text in U and in the rest of β is:

συμβαίνει δ' ἐνίους ἅπαξ ἐθισθῆναι μᾶλλον [θᾶπτον α] ἢ ἑτέρους [ἄλλους α] πολλάκις κινουμένους.

Written in the margin of U by the original scribe we find:

γράφεται συμβαίνει δ' ἔνια ἅπαξ ἐθισθῆναι μᾶλλον ἢ ἕτερα πολλάκις κινουμένους.

The variant ἔνια ... ἕτερα is not found in any other ms. It is not found in Michael of Ephesos either, but his commentary shows that the Byzantines, like modern scholars, were uncertain as to the precise meaning of this sentence.<sup>33</sup>

Ross, partly following Freudenthal, rightly considered the discrepancy between ἔνια and ἕτεροι in the following line too great,<sup>34</sup> and since ἔνιοι is impossible, he read ἕτερα with a few mss. instead of ἕτεροι. The resulting reading makes Aristotle contrast the things remembered instead of the persons remembering, and, as a consequence of this, ἐνίους ... ἑτέρους (ἄλλους) cannot (*pace* Siwek and King) be read in the preceding sentence. The variant reading in U may originally have been an attempt at correction along the same lines as Ross, but while Ross was focusing on the previous part of the text and therefore wanted to read ἐνίας ... ἑτέρας (referring to κινήσεις), the originator of the reading in U focused on the following part of the text and wrote ἔνια ... ἕτερα. I think it is most likely that the reading of U is a true variant reading. At least, this is indicated by the use of γράφεται.

The other minor branch, *viz.* ι, is very corrupt and contaminated, but 437b15–21 mentioned above establishes that it stems from θ, and it

<sup>32</sup> It must be noted that O<sup>d</sup> has been badly damaged at the top of every page. If the other manuscripts of μ agree when the reading of O<sup>d</sup> is indiscernible, I take this to be the reading of μ. Also, when there is any sort of textual variation in a passage and the reading of μ cannot be established on the basis of S and U, it is noted that the reading of O<sup>d</sup> is uncertain. However, when there are no textual variations among the other manuscripts in the passage, no mention is made about the uncertainty of the reading of O<sup>d</sup>.

<sup>33</sup> Mich. Ephes., *In mem.* 25.23–29.

<sup>34</sup> *Mem.* 451b15–16.



certainly does not originate from any of the  $\mu$  manuscripts. Even worse than the mere corruption is however the fact that in the middle of the *De sensu* (approximately at 442b26) quite a few manuscripts apparently start using different traditions (in particular the  $\varrho$  tradition or, more precisely, the ancestor of  $m$  was apparently used): in some cases the new material is used in addition to the tradition that has been copied so far ( $N$ ; the same has, apparently, happened in  $P$ ), in other cases the new tradition completely replaces the existing one ( $V$ ).<sup>35</sup> All manuscripts of this sub-branch seem to be affected by such a phenomenon, but some are apparently less so than others, in particular  $v$  and  $Z^a$ .

In the second part of the texts, that is, from the *De sensu* 442b27 to the end of the *De memoria* (453b11), which is the important part for our purpose, the only relevant manuscripts for the reading of  $\iota$  are  $NvZ^a$ . It is clear from my investigations that they can contribute very little when one is establishing the texts.  $N$ ,  $v$  and  $Z^a$  are very corrupt manuscripts, and they have all been contaminated by the source of  $m$ . The contamination is found much more extensively in  $N$  than in  $v$  and  $Z^a$ , but that does not make the latter two manuscripts more valuable than  $N$ , since they are both incredibly corrupt. Agreements of  $NvZ^a$  against  $m$  may be considered by the editor as a possible alternative to  $\mu$ , but, unless they are otherwise supported, they carry little weight. If they have some plausibility, they are cited in the apparatus.

As regards  $m$  it cannot generally be used for anything other than informing the editor whether or not its ancestor might have been a contaminating source of other manuscripts. Its readings are not cited as manuscript readings, since the peculiarities of  $m$  are most likely to have been caused by conjecture or by error. If I believe the reading to be of some interest, it is, however, cited in the apparatus.

Finally,  $P$  is very difficult to use. Due to the general nature of this manuscript, the editor will do well to cite all variant readings that are not blatant errors: primarily because there is still no agreement concerning the value of this manuscript, and scholars should be given the opportunity to make up their own mind. I believe, however, that there is at least one, very conspicuous passage in the *De sensu* in which  $P$  has a reading that must be considered independent evidence of a  $\gamma$  tradition. I will review this passage a little more closely.

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<sup>35</sup> For the first part of the *De sensu*,  $V$  is a  $\beta$  manuscript, closely related to  $N$ , but in the part containing the *De memoria* it adheres, as I have already said, closely to  $E$ .

In 437b30–31 the other manuscripts, with only a few variations in spelling, read:

πῦρ (φῶς β) δ' ἔξω διαθρῶσκον, ὅσον ταναώτερον ἦεν,  
λάμπεσκεν κατὰ βῆλὸν ἀτειρέσιν ἀκτίνεσσιν.

However, P has included διάνταται τρεῖατο θεσπεσίησιν ὀθόνησι after ἔξω, although the copyist has indicated that ὀθόνησι should be erased. Thus, this manuscript reads:

πῦρ δ' ἔξω διάνταται τρεῖατο θεσπεσίησιν διαθρῶσκον, ὅσον ταναώτερον ἦεν, λάμπεσκεν κατὰ βῆλὸν ἀτειρέσιν ἀκτίνεσσιν.

This is certainly not a normal intrusion into the text. An, admittedly, corrupt verse completely in line with the rest of the fragment, and in style and choice of words it seems thoroughly Empedoclean. As it stands, it does not make sense, but F. Blass used the words, along with χοανῆσι (!) found for ὀθόνησι in 438a1 in P, to restore a verse after 438a1 with the text: (αἰ) χοάνησι διάντα τετρήατο θεσπεσίησιν.<sup>36</sup> The Diels/Kranz edition of the fragments adopted Blass' conjecture, and so did Förster and Ross for the *De sensu*. Siwek does not mention the conjecture and does not inform the reader that P has this reading in 437b30.

Either the text in P is a corrupt version of the original Empedoclean quotation, or it is the work of a very gifted copyist. I think it can be stated with certainty that if the verse was written by a copyist it must have originated much earlier than P itself. I have found nothing remotely similar in the entire corpus of scholia on the *De sensu* and the *De memoria*. On the contrary, in this particular Empedoclean fragment the scholiasts are very busy explaining words and phrases; they do not at all seem capable of adding to the text. Quite a few of the scholia have been taken from Alexander's commentary,<sup>37</sup> which, incidentally, shows that the need to explain the difficult words was felt already in A.D. 200. Furthermore, copyists usually do not deliberately expand on the text of Aristotle. They often provide explanations of difficult passages and interpretations of unclear phrases, but these are not meant to be incorporated into the Aristotelian text. When this happens, and it often does, it is, apparently, caused by plain mistakes or uncertainty as to whether a particular phrase is part of the text or part of the scholia. Admittedly, the number of passages elaborated on by the tradition of P is some-

<sup>36</sup> Blass (1883) 19–20.

<sup>37</sup> Alex. Aphr., *In sens.* 23.5–24.9.

what alarming, but whether it was done consciously or unconsciously we cannot know.

It is perhaps a little suspicious that there are so few textually interesting passages in P. But, on the other hand, Nussbaum has pointed to an almost equally interesting passage in the *De motu animalium* in which P alone has the correct reading,<sup>38</sup> and Ross' Appendix II in his edition of the *De anima* is also suggestive.<sup>39</sup>

Still, P is clearly part of the  $\beta$  tradition, and therefore agreements with  $\beta$  cannot be taken as independent evidence in favour of this textual tradition. Agreements with  $\alpha$  are either contaminations or evidence of  $\gamma$ . Unfortunately, it cannot be determined which. I tend to believe that most of them are due to contamination.

When  $\vartheta$  and  $\varrho$  agree, we have the reading of  $\beta$ . When they disagree, an agreement between  $\alpha$  and  $\varrho$  provides virtually certain evidence of  $\beta$  and *ipso facto* of the *archetypus* of the entire tradition. It is also considered evidence in favour of  $\beta$  when  $\varrho$  sides with  $\iota$  but not equally strong. When  $\alpha$  and  $\vartheta$  agree, the evidence is not equally solid, because this branch has suffered more from contamination than  $\varrho$ . Still, if neither the intrinsic value of  $\varrho$  nor any other evidence tells against it, the support of  $\alpha$  will determine the reading of  $\beta$ . In this case, the support of P will also strengthen the case. If  $\varrho$  and  $\vartheta$  disagree, and  $\alpha$  has a third reading, the support of P will also be thought decisive, if the decision cannot be made based on the intrinsic value of the readings. When it is not possible to tell which branch of the tradition has the reading of  $\beta$ , I believe that  $\varrho$ , being less contaminated, is to be preferred over  $\vartheta$ , and in such cases it has therefore been assumed to be the reading of  $\beta$ .<sup>40</sup>

### A Note on the Critical Apparatus

An explanatory note about the critical apparatus is in order. Of some manuscripts I record all the readings (except trivial errors), while of others I do not record the readings. This has been explained in the preceding sections. Still, it should be noted that if a variant reading is recorded as found in one of the manuscripts whose readings I always

<sup>38</sup> *MA*. 700b23–24.

<sup>39</sup> Nussbaum (1976) 130 [NB! 700a23–24 in her text should read 700b23–24]; Ross (1961).

<sup>40</sup> It is, of course, also possible that  $\beta$  contained variant readings which spread in the different copies made.

mention in the apparatus, *all* manuscripts containing this particular reading have been mentioned in the apparatus. Thus, the readings of very corrupt manuscripts such as e.g. v and Z<sup>a</sup> will sometimes be seen in the apparatus, if the same reading is found in a valuable manuscript. If the siglum for a manuscript that I always cite is not found in a given entry, the manuscript contains the reading that has been printed. But, on the other hand, when a manuscript, the reading of which I do not usually record (Z<sup>a</sup> is an illustrious example), is not mentioned in an entry, it cannot be deduced whether it agrees with the printed reading or has a peculiar reading of its own.

### *Secondary Evidence*

#### The Latin Translations

The Latin translations are the *translatio vetus* (12th century) and the *translatio nova* (13th century). The *translatio vetus* of the *De memoria* is made by James of Venice. The *translatio nova* is by William of Moerbeke.<sup>41</sup>

The *translatio vetus* belongs to the α tradition, although some contamination is certain. It is clearly related to C<sup>e</sup>Mi, and even though the relationship is less conspicuous for the *De sensu* translation the same applies here.<sup>42</sup> The *translatio nova* of William of Moerbeke is based on the older translation with the additional use of some Greek manuscripts. William has inserted passages and words (in particular, καί) omitted in the *vetus*, retranslated particles, and generally polished the translation. In particular for the *De sensu* it is obvious (and interesting) that William had access to a manuscript very similar to the peculiar P; this is less clear for the *De memoria*.<sup>43</sup> The *translatio vetus* contributes little to the text, since it almost certainly originates from E, and William's translation can at most show

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<sup>41</sup> For the *translatio vetus* I have used the ms. Avranches, Bibl. Municipale 221 (f. 21<sup>1</sup>–24<sup>r</sup>). Note, however, that Ana Palanciuc is currently preparing a critical edition. For the *translatio nova*, I have used the edition in Gauthier (1985). I have also collated the Latin translations of the *De sensu*. For the *vetus* I have used a still unpublished edition prepared for the Aristoteles Latinus by Ludwig Peeters and later revised by Griet Galle, which they generously provided me with. For the *nova* I have used Gauthier (1985).

<sup>42</sup> Griet Galle, who has carefully examined the stemmatic relationships of the *translatio vetus* of the *De sensu*, has confirmed that this is indeed the case. I owe thanks to her for sharing her views and theories with me.

<sup>43</sup> However, Düring (1943) 54–55, for the *De partibus animalium*, and Nussbaum (1976) 128–131, 133–134, for the *De motu animalium*, have found similar relationships between William and P.

that a reading in P is not an error peculiar to that manuscript. Even though they are not very important in constituting the text, I have regularly cited the translations in the apparatus: partly because they can be used almost on a par with Greek manuscripts,<sup>44</sup> and the *vetus* is older than most of these manuscripts, and partly because they might be used to shed further light on parts of the Greek tradition (in particular concerning C<sup>c</sup>Mi and P).

### The Greek Medieval Commentaries

I have examined all the Greek medieval commentaries,<sup>45</sup> but little use can be made of them in a critical edition. It is, however, clear that all commentators are more closely related to  $\beta$  than to  $\alpha$ . Michael of Ephesos is cited in the apparatus when he differs from the manuscript tradition, since the question of his value has not been conclusively settled, and scholars will need the readings to make up their own minds. All readings of Michael are divided into lemmata, citations, paraphrases and *variae lectiones*.<sup>46</sup>

I have shown elsewhere in an article that Alexander's commentary on the *De sensu* has hitherto been used too optimistically by editors,<sup>47</sup> and the same arguments apply to a large extent to Michael; the arguments can be gathered from my article and I will only briefly restate the conclusions.

The lemmata are very unreliable guides to the Aristotelian text. Even if they are written by Alexander himself (which, most often, they probably are not), they are inaccurate and often contradict the evidence presented in Alexander's own comments. The citations are Alexander's own, but generally they are difficult to separate from paraphrases, and

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<sup>44</sup> A few restrictions: (1) Word-order cannot generally be established on the basis of the Latin translations, even though they will often follow the Greek; (2) modes and cases of verbs and nouns can never be relied on; (3)  $\tau\epsilon$  and  $\gamma\epsilon$  are usually not translated into Latin.

<sup>45</sup> Michael was collated from *Commentaria in Aristotelem Graeca*, XXII.1, Ed. P. Wendland (Berolini 1903). For Sophonias I have used the *Commentaria in Aristotelem Graeca*, V.6, Ed. P. Wendland (Berolini 1903). For Metochites I have used my own edition (Bloch 2005) based on three manuscripts: Vat. gr. 303 (olim 665), Par. gr. 1935 and Marc. gr. 239. For Pachymeres I have used the autograph manuscript Berlin, Hamilton 512. Scholarios was examined using M. Jugie et al. (eds.), *Oeuvres Complètes de Gennade Scholarios*, Tome VII (Paris 1936) 455–457.

<sup>46</sup> See the "Conspectus Siglorum" below.

<sup>47</sup> Bloch (2003).

the latter are almost always useless in establishing the Aristotelian text. Thus, only the rare passages, in which Alexander explicitly discusses particular variant readings, can be used as solid textual evidence dating from about A.D. 200.

The commentary by Michael of Ephesos follows the pattern of Alexander's. The same uncertainties about citations (and most likely also about the lemmata) apply in this case. Furthermore, Michael is a relatively late source (12th century), and thus his readings, even if they could be established beyond any doubt, are not very interesting. Still, since the rest of the commentary tradition depends on Michael's work, his readings are provided in the apparatus.

Sophonias, Theodoros Metochites, Georgios Pachymeres and Genadios Scholarios, on the other hand, are not cited. They are all paraphrases of different kinds: unilluminating (Sophonias), talkative (Metochites), paraphrasing commentary (Pachymeres), and general comments on memory (Scholarios). Furthermore, even though they must all have seen the Greek Aristotelian text, it is clear that they depend primarily on Michael: Sophonias<sup>48</sup> and Metochites<sup>49</sup> probably directly and certainly extensively, while Pachymeres seems to be more independent, but the text contains nothing original, and Scholarios knows the Michaelian tradition through Metochites, whose wording he has often reproduced *verbatim*.<sup>50</sup>

### *Ratio Edendi*

In the section on the manuscripts above I have explained the rather complicated process of obtaining the archetypal reading, and what material must be excluded in the process. I will now proceed to state

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<sup>48</sup> For obvious borrowings, cf. Mich. 10.21–26~Soph. 3.16–17 : Mich. 3.9–10~Soph. 4.24–26 : Mich. 3.13–28~Soph. 4.32–5.6 : Mich. 19.21~Soph. 7.30–8.1 : Mich. 24.17ff.~Soph. 8.17ff.: Mich. 24.23ff.~Soph. 8.24–29 : Mich. 25.14ff.~Soph. 9.1ff.: Mich. 26.7~Soph. 9.15ff.: Mich. 28.29ff.~Soph. 10.25–27.

<sup>49</sup> Some illustrative examples: Euripides' *Hecuba* vv. 1–2 cited as illustration, Michael (21.6–7) and Metochites (*in Mem.*, ed. Bloch, 2005, 21): Reference to the *De somno*, Michael (39.22) and Metochites (*in Mem.*, ed. Bloch, 2005, 28). See also Bloch (2005) 3–9.

<sup>50</sup> Cf. also the example in Mich. 8.11–13. Here, in describing the case of a donkey that remembers, Michael and Sophonias (2.12–14) use the words πέθουσιν—βόθρος—ἀναχωρεῖν—πίπτειν. Metochites, *in Mem.*, ed. Bloch (2005), 13, and Scholarios use ἐμπίπτειν—λάκκος—συντηγεῖν. This conclusion agrees with Drossaart Lulofs (1943) XXVII.

my general views on how to treat this archetypal reading, that is, the principles proper of constituting the text. A clear exposition of my views on the treatment of manuscript readings is needed because philologists of the 20th and 21st centuries have disagreed substantially concerning which principles to apply when editing an ancient or medieval text.

The thing most conspicuously proved by the hundreds of variant readings found in the manuscripts in just these 13 odd pages of relevant text is the fact that all manuscripts contain several errors. This, at least, is indisputable. The oldest manuscripts containing the *De memoria* are from the 10th and 11th centuries, and most manuscripts are from the 13th and 14th centuries. The *archetypus* of our manuscript tradition is not likely to be many centuries older than the extant manuscripts, leaving 500–1000 years in which mistakes have crept into the texts through continuous copying.

Thus, since the archetypal reading is itself often a corrupted form of Aristotle's text, we must always be prepared to correct it, when grammar or sense do not correspond to Aristotelian usage and intention. An archetypal reading must be treated with a critical respectful attitude as the carrier of a text that has reached us safe but not unharmed.

How then to establish "Aristotelian usage and intention"? Admittedly, it cannot be done with complete certainty, but we do possess a large corpus of Aristotelian writings that are certainly indicative, and computers have made investigations a lot easier. Scholars are gradually establishing the peculiar character of the texts and examining the scholarly language of Aristotle and the relationships between the different texts. This knowledge can be put to use also in critical editions, even if the result can never be the certainly correct reading of the original Aristotelian text.

My method of editing, then, is the following: I adopt the archetypal reading in all instances where nothing tells against it. When it is uncertain which reading is the archetypal one, I follow  $\beta$ . If I do not follow  $\beta$ , I always state the reason for not doing so in the notes on the text with reference to the Bekker line(s). Finally, in a number of passages I find the archetypal reading impossible or unlikely. In such cases, I normally adopt emendations proposed by other scholars or make emendations of my own. My reasons for suspecting a passage are always stated in the Textual Notes on the *De Memoria*; I accept only emendations and conjectures that are both philosophically and paleographically plausible. If I suspect a passage but cannot satisfactorily explain the corruption, I insert the *obeli* ( $\dagger\dots\dagger$ ), and sometimes I suggest a possible solution in

the apparatus; the reasons for suspecting the passage will always be explained in the Textual Notes on the *De Memoria*. In a few passages I have also stated my reasons for adopting an authoritative manuscript reading that has not been accepted by other editors.

The procedure described above has, I trust, produced an edition that can be easily evaluated by other scholars. The reader should always be able to understand why I have adopted a particular reading—either based on the manuscript evidence or on the reasons stated in the notes on the text. This characteristic of the edition is a somewhat novel feature and of primary importance compared to the other modern editions of the *De memoria*. Turning to some other important differences, my views on the manuscript tradition have prompted me to adopt more conjectural emendations than is perhaps usual. W.D. Ross' and, to a lesser degree, A. Förster's editions are comparable in this respect, while R. Mugnier's and, in particular, P. Siwek's editions are generally more hostile towards conjectural criticism. However, contrary to Förster and Ross, who both have a somewhat narrow manuscript foundation, I have worked out the stemmatic relationships in detail and tried to establish the archetypal reading in all cases before judging the matter. Ross explicitly endorses an entirely eclectic approach, in which he chooses more or less freely from the available readings of his manuscripts. But a reading, which can be shown conclusively *not* to have been the archetypal reading, hardly has more authority than a scholarly conjecture.

### *Formal Principles*

The apparatus is, as tradition prescribes, in Latin. My comments are printed in Italics; the readings of the Latin medieval translations are, when cited in the apparatus, printed in Roman types.

In some cases the manuscripts seriously disagree regarding the form of a word, and sometimes the word is found repeatedly in the text (e.g. ἑάν/ἄν, αἰί/αἰεί, δεῖν/δοῖν, οὐδέν/οὐθέν). In such cases I have adopted the formal principle of always printing the form that is better attested in the manuscripts. It must be stressed that this is a formal, not a substantial principle. On the evidence available, there simply is no way of telling how Aristotle handled these forms.

Only in a few instances do I interfere with the orthography of the manuscripts. I generally place the moveable ν and the moveable ζ at the end of sentences and before vowels, even when not found in



the manuscripts. I generally write γγ-, not γι-, in forms of γίγνεσθαι and γγνώσκειν, since manuscript readings, contrary to the examples mentioned in the preceding paragraph, are completely random on these variations. The iota nowadays usually written subscript is often omitted or written adscript in the manuscripts. I always introduce the subscript, regardless of manuscript authority. Similarly, I do not respect the accentuation of the manuscripts but have imposed classical standards. These processes are not noted in the apparatus.<sup>51</sup>

I have imposed my own punctuation and paragraphing on the text.

### *The Translation of the De Memoria*

The English translation that accompanies the text is meant as an aid to understanding the Greek text; it is *not* a literal translation in the usual sense of “literal”, and it certainly will not find favour with all scholars. In particular, I should mention that I never retain pronouns, unexpressed subjects and objects, etc., if this makes the English translation even more enigmatic than the original Greek text, and in fact this is often the case. Furthermore, I do not deliberately avoid the Aristotelian word order, but I am not in any way constrained by it either. What I strive for in all cases is to reproduce both the content and the style of the treatise, but if both cannot be done (and, in my view, sometimes this is simply not possible), I focus attention primarily on the content; I am under the impression that some translators try to choose style with the unfortunate result that the philosophical content is further obscured. I actually believe that I have produced a precise and accurate translation, and in some respects I even think that it is more precise than any existing English translation of the text.<sup>52</sup>

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<sup>51</sup> These principles for regularisation are essentially like the ones used by Brunschwig (1967) cxxxviii and Balme (2002) xii–xiii, although we differ as regards where to be “inconsistent”.

<sup>52</sup> In particular, I have distinguished carefully between “remember” (μνημονεύειν) and “recall” (μεμνήσθαι), which I believe to be a crucial distinction (see Essay 1 below). For the usual view on the translation of these terms, cf. Sorabji (2004<sup>2</sup>) 1.

*The Textual Notes on the De Memoria*

The notes on the text have already been mentioned several times above. These too should be used as an aid to understanding the Greek text. Their sole purpose is to explain the reasons when I divert from my regular editorial procedures. Thus, whenever I do not follow the archetypal reading (or β, when the archetypal reading cannot be established), my reasons for not doing so are explained in these notes. As a natural consequence, the notes do not usually comment on the philosophical content of the text, but if my reasons for preferring another reading than the archetypal are primarily philosophical, then some discussion of the content can be found. Passages are referred to by Bekker-line(s).

*Abbreviations and Critical Signs Used in the Text and in the Apparatus*

{ω/o}	littera o supra ω scripta est.
⟨αῖσθησις⟩	αῖσθησις addendum esse puto.
[αῖσθησις]	αῖσθησις delendum esse puto.
†αῖσθησις†	verbum αῖσθησις corruptum esse puto.
a.c.	ante correcturam.
cens.	censuit.
cf.	confer, conferend-us/a/-um etc.
cit.	citatio.
comp.	compendium.
coni.	coniecit.
corr.	correxuit.
def.	defendit.
del.	delevit.
eras.	erasit <i>vel</i> eras-us/a/-um etc.
fort.	fortasse.
in marg.	in margine.
in ras.	in rasura.
ins.	inseruit.
lac.	lacuna.
om.	omisit.
p.c.	post correcturam.
paraphr.	paraphrasis.
prob.	probavit.
s.l.	supra lineam.
susp.	suspexit.
ut v.	ut videtur.
v.l.	varia lectio.

*Conspectus Siglorum*

$\alpha$ .	EYbVC <sup>c</sup> Mi
$\beta$ .	LH <sup>a</sup> X UO <sup>d</sup> S NvZ <sup>a</sup> m
$\varrho$ .	LH <sup>a</sup> X
$\vartheta$ .	UO <sup>d</sup> S NvZ <sup>a</sup>
$\mu$ .	UO <sup>d</sup> S
$\iota$ .	NvZ <sup>a</sup>

E	Par. gr. 1853. s. x.
Y	Vat. gr. 261. s. xiii–xiv.
b	Par. gr. 1859. s. xiv.
V	Vat. gr. 266. s. xiii–xiv.
C <sup>c</sup>	Par. Suppl. gr. 314. s. xiv.
M	Urb. gr. 37. s. xiv.
i	Par. gr. 2032. s. xiv.
L	Vat. gr. 253. s. xiv.
H <sup>a</sup>	Marc. gr. Z 214. s. xiii–xiv.
X	Ambr. 435, H 50 Sup. s. xii–xiii.
U	Vat. gr. 260. s. xii.
O <sup>d</sup>	Marc. gr. Z 209. s. xii–xiii.
S	Laur. Plut. 81.1. s. xii–xiii.
N	Vat. gr. 258. s. xiii–xiv.
v	Laur. Plut. 87.20. s. xiv.
Z <sup>a</sup>	Laur. Plut. 87.21. s. xiv.
m	Par. gr. 1921. s. xiv.
P	Vat. gr. 1339. s. xiv.

$\Gamma^1$ . s. xii.	Latin <i>translatio vetus</i> . James of Venice.
$\Gamma^2$ . s. xiii.	Latin <i>translatio nova</i> . William of Moerbeke.

Mich <sup>l</sup> .	Michael's lemma.
Mich <sup>c</sup> .	Michael's citation.
Mich <sup>p</sup> .	Michael's paraphrase.
Mich <sup>v</sup> .	Michael mentions an alternative reading ( <i>varia lectio</i> ).

Textual Foundation: EC<sup>c</sup>LH<sup>a</sup>XUO<sup>d</sup>SP $\Gamma^1$  $\Gamma^1$ Mich<sup>l/c/p/v</sup> are always cited.



CHAPTER TWO

*DE MEMORIA ET REMINISCENTIA:*  
TEXT AND TRANSLATION

## ΠΕΡΙ ΜΝΗΜΗΣ ΚΑΙ ΑΝΑΜΝΗΣΕΩΣ

### I

- 449b<sup>4</sup> Περὶ μνήμης καὶ τοῦ μνημονεύειν  
 4 λεκτέον, τί ἐστι, καὶ διὰ τίν' αἰτίαν γίνεταί, καὶ τίνι  
 5 τῶν τῆς ψυχῆς μορίων συμβαίνει τοῦτο τὸ πάθος, καὶ τὸ  
 ἀναμνησθῆναι οὐ γὰρ οἱ αὐτοὶ εἰσι μνημονικοὶ καὶ  
 ἀναμνηστικοί, ἀλλ' ὥς ἐπὶ τὸ πολὺ μνημονικώτεροι μὲν οἱ  
 βραδεῖς, ἀναμνηστικώτεροι δ' οἱ ταχεῖς καὶ εὐμαθεῖς.  
 πρῶτον μὲν οὖν σκεπτέον ποῖά ἐστι τὰ μνημονευτά· πολ-  
 10 λάκις γὰρ ἑξαπατᾷ τοῦτο. οὔτε γὰρ τὸ μέλλον ἐνδέχε-  
 ται μνημονεύειν, ἀλλ' ἔστι δοξαστὸν καὶ ἐλπιστὸν (εἴη δ' ἂν  
 καὶ ἐπιστήμη τις ἐλπιστική, καθάπερ τινὲς φασὶ τὴν μαντι-  
 κήν), οὔτε τοῦ παρόντος, ἀλλ' αἰσθησις ταύτη γὰρ οὔτε τὸ  
 15 μέλλον οὔτε τὸ γενόμενον γνωρίζομεν, ἀλλὰ τὸ παρὸν μό-  
 νον. ἡ δὲ μνήμη τοῦ γενομένου· τὸ δὲ παρὸν ὅτε πάρεστιν,  
 οἷον τοδὶ τὸ λευκὸν ὅτε ὀρθῶ, οὐδεὶς ἂν φαίη μνημονεύειν,  
 οὐδὲ τὸ θεωρούμενον, θεωρῶν καὶ ἐννοῶν· ἀλλὰ  
 τὸ μὲν αἰσθάνεσθαι φησιν, τὸ δ' ἐπίστασθαι μόνον· ὅταν δ'  
 ἄνευ τῶν ἔργων σχῇ τὴν ἐπιστήμην καὶ τὴν αἰσθησιν, οὕτω

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449b<sup>4</sup>. Περὶ] Τῶν δὲ λοιπῶν πρῶτον σκεπτέον περὶ *C<sup>c</sup>MiΓ<sup>1</sup>* : Περὶ δὲ *vZ<sup>a</sup>m Mich<sup>1</sup>* || τοῦ μνημονεύειν] τοῦ μνημονευτικοῦ *H<sup>a</sup>* || λεκτέον] *om. C<sup>c</sup>MiΓ<sup>1</sup>* || τί ἐστι] *quod Γ<sup>1</sup>* || τίν' αἰτίαν] τίνας αἰτίας *C<sup>c</sup>MiΓ<sup>1</sup>* || 449b<sup>5</sup>. συμβαίνει τοῦτο τὸ πάθος] τοῦτο συμβαίνει τὸ πάθος *μC<sup>c</sup>MiN* : τοῦτό τε συμβαίνει τὸ πάθος *P* : *hec accidat passio Γ<sup>1</sup>Γ<sup>2</sup>* || τὸς] τοῦ *μXvZ<sup>a</sup>* || 449b<sup>6</sup>. οἱ αὐτοὶ] *om. Γ<sup>1</sup>* || καὶ] τε καὶ *P* || 449b<sup>7</sup>. μνημονικώτεροι] μνημονικοὶ *E<sup>1</sup>Yb* : *memorabiliores sunt Γ<sup>1</sup>* : *memorabiliores Γ<sup>2</sup>* || 449b<sup>8</sup>. ἀναμνηστικώτεροι] ἀναμνηστικοὶ *E<sup>1</sup>Yb* || 449b<sup>9</sup>. σκεπτέον] ληπτέον *αPΓ<sup>1</sup>Γ<sup>2</sup>* || ποῖά ἐστι] ποῖά εἰσι *qO<sup>d</sup>m Mich<sup>p</sup>(6.24, sed vide 6.19)* || τὰ] *om. β Mich<sup>1p</sup>* || 449b<sup>10</sup>. ἑξαπατᾷ] ἑξαπατᾷ[.]ται *E(ι litt. eras.)* || 449b<sup>12-13</sup>. τινὲς φασὶ τὴν μαντικήν] φασὶ τινες τὴν μαντικήν *UvZ<sup>a</sup>m* : *quidam et diuinatiuam esse dicunt Γ<sup>1</sup>* : *quidam divinatiam dicunt Γ<sup>2</sup>* || 449b<sup>13</sup>. αἰσθησις] αἰσθησιν *S* || 449b<sup>14</sup>. γενόμενον] γινόμενον *X* || 449b<sup>15</sup>. ὅτε] ὅτι *EYbV* || 449b<sup>16</sup>. τοδὶ] *om. C<sup>c</sup>MimΓ<sup>1</sup>* || τὸ] *om. O<sup>d</sup>S* || ὀρθῶ] *aliquis uidet Γ<sup>1</sup>Γ<sup>2</sup>* || 449b<sup>17</sup>. θεωρῶν καὶ ἐννοῶν] *scripsi duce Z<sup>a</sup>* : θεωρῶν καὶ νοῶν *qμNvmP* : ὅτε θεωρῶν τυγχάνει ἐννοῶν *E<sup>3</sup>YbVv* : ὅτε θεωροῦν τυγχάνει ἐννοῶν *E<sup>1</sup>* : ὅτε θεωρῶν τυγχάνει νοῶν *C<sup>c</sup>Mi* : *cum sit considerans et intelligens Γ<sup>1</sup>Γ<sup>2</sup>* || 449b<sup>18</sup>. φησιν] φασιν *iΓ<sup>2</sup>* || 449b<sup>19</sup>. ἔργων] ἐνεργειῶν *αU* : *actibus Γ<sup>1</sup>* : *actibus vel operibus Γ<sup>2</sup>* || σχῇ] ἔχη *αP* : *habeat Γ<sup>1</sup>Γ<sup>2</sup>*

## *On Memory and Recollection*

### *Chapter 1*

{449b4} Concerning memory and remembering we must state what it is, the reason for its occurrence, and in which part of the soul this affection occurs, and we must do the same with recollecting; for the people who are good at remembering are not the same as the ones who are good at recollecting: most often slow-witted people are better at remembering, while the quick-witted and those who learn easily are better at recollecting.

First, then, we must examine what kind of objects of memory there are; for this point is often the cause of mistakes. For one cannot remember the future, but of this one has opinion and expectation (and there might even be a science of expectation, as some say that divination is); nor can one remember the present, but of this there is sensation; for by sensation we cognise neither the future nor the past but only the present. Now, memory is of the past; and nobody would claim to remember the present, when it is actually present, for instance, that he is remembering this particular white object when he is in fact looking at it, nor would he claim that he is remembering an object of contemplation while contemplating and thinking about it; one can only claim to sense the white object and to know the object of contemplation. However, when one has knowledge and sensation without performing these actions,<sup>1</sup> then he recalls,<sup>2</sup> in the case of knowledge because he has

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<sup>1</sup> “without performing these actions”] The translation of ἄνευ τῶν ἔργων. For this interpretation of ἔργον, cf. the Textual Notes *ad loc.* Possibly, one should rather translate “without the [original] objects [being present]”, but I do not think that it matters greatly as regards the general argument of the passage. In this way Aristotle tells us that there is a third way of having such internal objects.

<sup>2</sup> recalls] In the following passage “because” is the translation of ὅτι (twice). All recent translators have preferred “that”, but, as Sorabji (2004<sup>2</sup>) 68 rightly remarks, based on 449b15–18 we expect to be told about the conditions for remembering a particular object, not the conditions for remembering that this object was experienced or thought in the past. On my interpretation of μέμνηται, the translation “because” is, however, understandable: one is brought into this state of recall, *because* the object was experienced earlier, which is the only possible explanation, Aristotle would say, since the objects are no longer there (see Essay 1, the section “Memory Words in the *De Memoria* 1” below).



20 μέμνηται [τάς τοῦ τριγώνου ὅτι δύο ὀρθαῖς ἴσαι], τὸ μὲν ὅτι  
ἔμαθεν ἢ ἐθεώρησεν, τὸ δ' ὅτι ἤκουσεν ἢ εἶδεν ἢ τι τοιοῦ-  
τον· αἰεὶ γὰρ ὅταν ἐνεργῇ κατὰ τὸ μνημονεύειν, οὕτως ἐν τῇ  
ψυχῇ λέγει, ὅτι πρότερον τοῦτο ἤκουσεν ἢ ἦσθητο ἢ ἐνόησεν.

ἔστι μὲν οὖν ἡ μνήμη οὔτε αἰσθησις οὔτε ὑπόληψις, ἀλλὰ τού-  
25 των τινὸς ἕξις ἢ πάθος, ὅταν γένηται χρόνος. τοῦ δὲ νῦν ἐν  
τῷ νῦν οὐκ ἔστι μνήμη, καθάπερ εἴρηται. ἔστι γὰρ  
τοῦ μὲν παρόντος αἰσθησις, τοῦ δὲ μέλλοντος ἐλπίς, τοῦ δὲ  
γενομένου μνήμη. διὸ μετὰ χρόνου πᾶσα μνήμη. ὥσθ' ὅσα  
χρόνου αἰσθάνεται, ταῦτα μόνα τῶν ζώων μνημονεύει, καὶ  
30 τοῦτ' ὧ αἰσθάνεται.

30 ἐπεὶ δὲ περὶ φαντασίας εἴρηται πρότε-  
ρον ἐν τοῖς Περι ψυχῆς, καὶ νοεῖν οὐκ ἔστιν ἄνευ φαντάσμα-  
450a τος—συμβαίνει γὰρ τὸ αὐτὸ πάθος ἐν τῷ νοεῖν ὅπερ καὶ ἐν  
τῷ διαγράφειν· ἐκεῖ τε γὰρ οὐδὲν προσχρώμενοι τῷ τὸ πο-  
σὸν ὠρισμένον εἶναι τοῦ τριγώνου, ὅμως γράφομεν ὠρισμένον  
κατὰ τὸ ποσόν· καὶ ὁ νοῶν ὡσαύτως, καὶ μὴ ποσὸν νοῇ,  
5 τίθεται πρὸ ὁμμάτων ποσόν, νοεῖ δ' οὐχ ἢ ποσόν· ἂν δ' ἡ  
φύσις ἢ τῶν ποσῶν, ἀορίστων δέ, τίθεται μὲν ποσὸν ὠριμέ-

449b20. τάς τοῦ τριγώνου ὅτι δύο ὀρθαῖς ἴσαι] *del. Freudenthal* : *voces in l. 17 (ante ὅτε) transponendas esse cens. Gohlke* || δύο] *duo* *E<sup>3</sup>Yb* : *duobus* *Γ<sup>1</sup>Γ<sup>2</sup>* : (*Mich<sup>p</sup> 10.3, 6: δυοῖν*) || ἴσαι] *equales sunt* *Γ<sup>1</sup>* || τὸ μὲν] *hoc* *Γ<sup>1</sup>* || 449b21. ἐθεώρησεν] *ἐθεώρη* *X* : *speculatus fuit* *Γ<sup>1</sup>Γ<sup>2</sup>* || 449b21–22. ἢ τι τοιοῦτον] ἢ ὅ τι τοιοῦτον *EYbVZ<sup>a</sup>* : τι τοιοῦτον *C<sup>c</sup>MiΓ<sup>1</sup>* || 449b22. αἰεὶ] *dei* *αΓ<sup>1</sup>* || γὰρ] *autem* *Γ<sup>1</sup>* || ἐνεργῇ κατὰ τὸ μνημονεύειν] *αριNimP* : ἐνεργῇ κατὰ τὴν μνήμην *Mich<sup>lc</sup>* : *secundum ipsum memorari agat* *Γ<sup>1</sup>* : *secundum memorari agat* *Γ<sup>2</sup>* || 449b23. λέγει] *λέγειν* *αΓ<sup>1</sup>* || ἤκουσεν] *susp. Freudenthal* || 449b24. ἔστι μὲν οὖν] *est igitur* *Γ<sup>1</sup>* || 449b25. γένηται χρόνος] *γέννηται* *χρόνιον* *E<sup>3</sup>YbV* : *fiat tempus* *Γ<sup>1</sup>* : *factum fuerit tempus* *Γ<sup>2</sup>* : ἐγγένηται χρόνιος *Christ* || δέ] *δη* *Susemihl* || ἐν] *et in* *Γ<sup>1</sup>* || 449b26. εἴρηται] *εἴρηται* καὶ πρότερον *EYbV* || 449b26–27. ἔστι γὰρ τοῦ μὲν παρόντος αἰσθησις] ἀλλὰ τοῦ μὲν παρόντος αἰσθησις *amΓ<sup>1</sup>Γ<sup>2</sup>* || 449b28. μνήμη] *et memoria est* *Γ<sup>1</sup>* : *memoria est* *Γ<sup>2</sup>* || διὸ] *di* *Mich<sup>c</sup>* || μετὰ χρόνου] *μετὰ* *χρόνον* *EYVC<sup>c</sup>MiX<sup>1</sup>* || πᾶσα μνήμη] *omnis memoria fit* *Γ<sup>1</sup>* : *memoria omnis* *Γ<sup>2</sup>* || ὅσα] *ὅσα* *τε* *EYbV* : *quaecumque animalium* *Γ<sup>1</sup>* : *quaecumque* *Γ<sup>2</sup>* || 449b29. ταῦτα] καὶ ὅ ταῦτα *E<sup>1</sup>C<sup>c</sup>MiΓ<sup>1</sup>Γ<sup>2</sup>* || μόνα τῶν ζώων] *om. Mich<sup>c/p</sup>(ut v.) : fort. τῶν ζώων delendum* || μνημονεύει] *μνημονεύει* τῶν ζώων *C<sup>c</sup>Mi* || 449b30. ἐπεὶ] *ἐτι* *P* || περὶ] *et de* *Γ<sup>1</sup>* || 450a1. τὸ αὐτὸ] *ταὐτὸ* *P* || ἐν τῷ νοεῖν] *et intellectui* *Γ<sup>1</sup>* : *intellectui* *Γ<sup>2</sup>* || 450a2. τῷ] *om. EYV<sup>1</sup>b* || 450a3. τοῦ] *τὸ* *Bekker (!)* : *an* *τὸ* τοῦ *scribendum?* || τριγώνου] *om. N(sed aliquid, ut v., eras.)Γ<sup>1</sup>* || 450a3–4. γράφομεν ὠρισμένον κατὰ τὸ ποσόν] *διαγράφομεν ὠρισμένον* *τριγώνον* κατὰ ποσόν *Mich<sup>p</sup>* || 450a4. ὁ νοῶν ὡσαύτως] *similiter opinatur* *Γ<sup>1</sup>* || ὁ νοῶν] *ὀνομάζομεν* *EYb<sup>1</sup>(ut v.)C<sup>c</sup>Mi* : *opinatur* *Γ<sup>1</sup>* || ὡσαύτως] *om. Mich<sup>c</sup>* || 450a5. νοεῖ] *νοῇ* *X* || οὐχ] *om. Γ<sup>1</sup>* || ποσόν] *quantitas est* *Γ<sup>1</sup>* : *quantum est* *Γ<sup>2</sup>* || 450a5–6. ἂν δ' ἡ φύσις ἢ τῶν ποσῶν] *quamvis quantitatum natura sit* *Γ<sup>1</sup>* : *an* *καὶ* *δ'* ἡ φύσις ἢ τῶν ποσῶν *scribendum?* || 450a6. ἀορίστων] *ἀόριστον* *E<sup>1</sup>N* : *indefinitas* *Γ<sup>1</sup>* || δέ] *esse* *Γ<sup>1</sup>* || μὲν] *om. O<sup>d</sup>* : *tamen* *Γ<sup>2</sup>*

learned it or contemplated it, in the case of sensation because he has heard or seen it or sensed it in some other way; for it is always the case that when a person actualises as regards his memory, what he does is to say in his soul that he has previously heard, sensed or thought about this.

Memory, then, is neither sensation nor conception, but a state of having one of these or an affection resulting from one of these, when some time elapses. As we have stated, there is no memory of the now in the now. For of the present there is sensation, of the future there is expectation, and of the past there is memory. Therefore, all memory happens with time.<sup>3</sup> Thus, only animals that sense time can remember, and they do their remembering using the same faculty,<sup>4</sup> by which they sense.

Now,<sup>5</sup> since we have already spoken about imagination in our discussions *On the Soul*,<sup>6</sup> and since it is not possible to think without an image—{450a} for the same affection that occurs in drawing a diagram also occurs in thinking: for when drawing a diagram we make no use of the fact that the quantity of the triangle drawn is determinate, but still we draw it as having a determinate quantity; and similarly a person who thinks, even if he does not think about a quantity, he posits a quantity before his eyes, but does not think about it as a quantity; and if the object by nature has quantity, but an indeterminate quantity, he posits a determinate quantity, but thinks about it as quantity

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<sup>3</sup> “all memory happens with time”] That is, memory is not established immediately upon sensing or having learnt something but only after some time has elapsed.

<sup>4</sup> “by the same faculty”] Alternatively, one might translate “by the same organ”, namely, the heart.

<sup>5</sup> “Now ...”] It is probably most plausible to take the passage beginning here as an anacoluthon.

<sup>6</sup> *On the Soul*] “Imagination” (φαντασία) is discussed primarily in *An.* III.3, but considering the following remark on thinking and images, Aristotle is probably referring to *An.* III.7.

- νον, νοεῖ δ' ἢ ποσὸν μόνον—διὰ τίνα μὲν οὖν αἰτίαν οὐκ ἐνδέ-  
χεται νοεῖν οὐδὲν ἄνευ συνεχοῦς, οὐδ' ἄνευ χρόνου τὰ μὴ  
ἐν χρόνῳ ὄντα, ἄλλος λόγος. μέγεθος δ' ἀναγκαῖον γνωρι-  
10 ζειν καὶ κίνησιν ᾧ καὶ χρόνον, καὶ τὸ φάντασμα τῆς κοι-  
νῆς αἰσθήσεως πάθος ἐστίν, ὥστε φανερόν ὅτι τῷ πρώτῳ αἰ-  
σθητικῷ τούτων ἡ γνώσις ἐστίν. ἡ δὲ μνήμη, καὶ ἡ τῶν νοη-  
τῶν, οὐκ ἄνευ φαντάσματος ἐστίν. ὥστε τοῦ νοῦ μὲν κατὰ  
συμβεβηκὸς ἂν εἴη, καθ' αὐτὸ δὲ τοῦ πρώτου αἰσθητικοῦ.  
15 διὸ καὶ ἑτέροις τισὶν ὑπάρχει τῶν ζώων, καὶ οὐ μόνον ἄν-  
θρωπῳ καὶ τοῖς ἔχουσιν δόξαν ἢ φρόνησιν. εἰ δὲ τῶν νοη-  
τικῶν τι μορίων ἦν, οὐκ ἂν ὑπῆρχε πολλοῖς τῶν ἄλλων  
ζώων (ἴσως δ' οὐδενὶ τῶν θνητῶν), ἐπεὶ οὐδὲ νῦν πᾶσι διὰ τὸ  
μὴ πάντα χρόνου αἰσθησὶν ἔχειν· ἀεὶ γὰρ ὅταν ἐνεργῇ τῇ  
20 μνήμῃ, καθάπερ καὶ πρότερον εἴπομεν, ὅτι εἶδε τοῦτο ἢ  
ἤκουσεν ἢ ἔμαθε, προσαισθάνεται ὅτι πρότερον· τὸ δὲ πρό-  
22 τερον καὶ ὕστερον ἐν χρόνῳ ἐστίν.
- 22 τίνος μὲν οὖν τῶν τῆς ψυ-  
χῆς ἐστὶν μνήμη, φανερόν, ὅτι οὐπερ καὶ φαντασία· καὶ  
ἐστὶ μνημονευτὰ καθ' αὐτὰ μὲν ὧν ἐστὶ φαντασία, κατὰ  
25 συμβεβηκὸς δ' ὅσα μὴ ἄνευ φαντασίας.

450a7. νοεῖ] νοῇ  $X$  || μόνον] solum est  $\Gamma^1$  || 450a8. οὐδὲν] *om.*  $E^1 v \zeta^a$  Mich<sup>1/c</sup> : οὐδ'  $UN$  || συνεχοῦς] τοῦ συνεχῶς  $EIV$  : continuo  $\Gamma^1 \Gamma^2$  || ἄνευ χρόνου] ἄνευ λόγου χρόνου  $P\Gamma^2$  || 450a8–9. τὰ μὴ ἐν χρόνῳ ὄντα] τὰ ἐν χρόνῳ μὴ ὄντα  $E^3(s.l.)$  : *om.*  $E^1 P$  || 450a9. ἄλλος λόγος] λόγος ἄλλος  $\alpha P$  || 450a9. δ'] *om.*  $E\Gamma b$  || 450a10. χρόνον] χρόνος  $E^1$  || 450a10–11. καὶ<sub>3</sub> (l. 10)–ἐστίν (l. 11)] *in l. 13 (post ἐστίν) transponenda esse coni. Freudenthal* || 450a10. καὶ τὸ φάντασμα] καὶ τὰ φαντάσματα Mich<sup>c</sup> : fantasia autem  $\Gamma^1$  || 450a10–11. τῆς κοινῆς] *om.*  $\Gamma^1$  || 450a11. ὥστε] ὥστε τοῦτο  $\alpha \Gamma^1$  : ὥστε τούτῳ  $m$  || 450a12. ἡ δὲ μνήμη] ἡ μνήμη δὲ  $qm$  || ἡ<sub>3</sub>] *om.* Mich<sup>c</sup> || 450a13. φαντάσματος] τῆς φαντασίας  $E\Gamma b V$  || τοῦ νοῦ μὲν] τοῦ νοουμένου  $\beta\Gamma b V(p.c.)$  Mich<sup>c</sup> (8.24–25)<sup>p</sup> : τοῦτο νοομεν  $E^1$  : τοῦ νοομένου  $E^3$  : τοῦ νοητικοῦ  $P$  : νοοῦντος *vel* τοῦ *scribendum esse cens. Zeller* : διανοοῦμένου *Bywater* || 450a14. τοῦ πρώτου αἰσθητικοῦ] τοῦ πρώτου αἰσθητοῦ *Brentano* || 450a15–16. ἀνθρώπῳ] ἀνθρώποις  $\alpha \Gamma^1$  || 450a16. καὶ] *aut*  $\Gamma^1$  || ἢ] καὶ  $M^1$  || 450a17. τι] τινὶ  $E^3$  : *om.*  $\Gamma b C^c M i M^1$  : τισὶ  $V$  || μορίων] μόριον  $P$  || 450a18. οὐδενὶ] οὐδὲν  $V^1(ut v.) C^c M i$  : οὐθενὶ  $v \zeta^a P$  || θνητῶν] ἀνοήτων *Förster* : θηρίων *Rassow* || 450a18. ἐπεὶ] quoniam autem  $\Gamma^1$  || πᾶσι] omnibus inest  $\Gamma^1$  || 450a19. πάντα] πάντων  $LH^a$  || ἀεὶ] δεῖ  $E\Gamma b V$  || 450a20. ἢ] *om.*  $S$  || 450a21. ἔμαθε] ἔπαθε  $P$  || προσαισθάνεται ὅτι πρότερον] προαισθάνεσθαι τι πρότερον  $E\Gamma b V(fort. ti eras.)$  : πρότερον προαισθάνεται  $C^c M i$  : ὅτι προαισθάνεται πρότερον  $O^4 S$  : πρότερον προαισθάνεται *Sorabji* : prius sensit  $\Gamma^1$  : simul sentit quia prius  $\Gamma^2$  || 450a22. καὶ] ἢ  $C^c M i \Gamma^1$  || 450a23. μνήμη] ἡ μνήμη  $\alpha NP$  : memoria sit  $\Gamma^1 \Gamma^2$  || φαντασία] ἡ φαντασία  $\alpha U$  : fantasia est  $\Gamma^1 \Gamma^2$  || 450a24. ἐστὶ μνημονευτὰ καθ' αὐτὰ μὲν] memorabilia hec quidem per se sunt  $\Gamma^1$  || ἐστὶ μνημονευτὰ] ἐστὶ σχεδὸν μνημονευτὰ  $H^a$  : μνημονευτὰ ταῦτ' ἐστὶ  $C^c i$  : memorabilia hec ... sunt  $\Gamma^1$  || ὧν ἐστὶ φαντασία] ὅσα μὴ ἐστὶ φαντασία  $E^1 \Gamma V^1$  : ὧν ἐστὶ φαντασία  $E^3$  : ὅσα ἐστὶ φαντασία *Bekker* : quorum et fantasia  $\Gamma^1$  || 450a25. ὅσα μὴ ἄνευ φαντασίας] ὅσα μετὰ φαντασίας  $C^c M i \Gamma^1$ , cf. Mich<sup>p</sup> 13.21–22

only<sup>7</sup>—Now, the reason why it is impossible to think anything without continuity, and impossible to think about things that are timeless without time, belongs to another discussion. But it is necessary to cognise magnitude and movement by the same faculty by which time is also cognised, and the image is an affection of the common sense; so it is clear that the cognition of these belongs to the primary faculty of sense. Now, memory, even memory of the objects of thought, does not occur without an image. Thus, memory will belong accidentally to the mind, but essentially to the primary faculty of sense. Therefore, it belongs also to some of the other animals and not only to man and to those animals that possess opinion or intelligence. If it were one of the thinking parts, many of the other animals would not possess it (probably no mortal creature would), since even now it does not belong to all, because not all animals have a sense of time; for, as we said earlier,<sup>8</sup> when a person actualises his memory for the fact that he has seen, heard or learned something, he senses in addition that he did this earlier; and the concepts of “earlier” and “later” belong in time.

As regards the question to which part of the soul memory belongs, it is, then, clear that it belongs to the same part as imagination; and those things that are essentially the objects of memory are also such of which there is imagination, while those that are accidentally objects of memory are those that do not occur without imagination.<sup>9</sup>

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<sup>7</sup> “as quantity only”] That is, not as a determinate quantity.

<sup>8</sup> “as we said earlier”] Cf. *Mem.* 449b18–23.

<sup>9</sup> “that do not occur without imagination”] Aristotle refers to the objects of thought.

- 25 ἀπορήσειε δ' ἂν  
 τις πῶς ποτὲ τοῦ μὲν πάθους παρόντος τοῦ δὲ πράγματος  
 ἀπόντος μνημονεύει τὸ μὴ παρόν. δῆλον γὰρ ὅτι δεῖ νοή-  
 σαι τοιοῦτον τὸ γινόμενον διὰ τῆς αἰσθήσεως ἐν τῇ ψυχῇ  
 καὶ τῷ μορίῳ τοῦ σώματος τῷ ἔχοντι αὐτήν, οἷον ζωγρά-  
 30 φημά τι [τὸ πάθος], οὗ φαμέν τὴν ἔξιν εἶναι μνήμην· ἡ γὰρ  
 γιγνομένη κίνησις ἐνσημαίνεται οἷον τύπον τινὰ τοῦ αἰσθημά-  
 τος, καθάπερ οἱ σφραγιζόμενοι τοῖς δακτυλίοις. διὸ καὶ τοῖς  
 450b μὲν ἐν κινήσει πολλῇ διὰ πάθος ἢ δι' ἡλικίαν οὖσιν οὐ γίγνε-  
 ται μνήμη, καθάπερ ἂν εἰς ὕδωρ ῥέον ἐμπιπτούσης τῆς κι-  
 νήσεως καὶ τῆς σφραγίδος· τοῖς δὲ διὰ τὸ ψήχεσθαι, κα-  
 θάπερ τὰ παλαιὰ τῶν οἰκοδομημάτων, καὶ διὰ σκληρό-  
 5 τητα τοῦ δεχομένου τὸ πάθος οὐκ ἐγγίγνεται ὁ τύπος. διόπερ  
 οἱ τε σφόδρα νέοι καὶ οἱ γέροντες ἀμνήμονες εἰσιν· ῥέουσι  
 γὰρ οἱ μὲν διὰ τὴν αὔξησιν, οἱ δὲ διὰ τὴν φθίσιν. ὁμοίως  
 δὲ καὶ οἱ λίαν ταχεῖς καὶ οἱ λίαν βραδεῖς οὐδέτεροι φαίνον-  
 ται μνήμονες· οἱ μὲν γὰρ εἰσιν ὑγρότεροι τοῦ δέοντος, οἱ δὲ  
 10 σκληρότεροι· τοῖς μὲν οὖν οὐ μένει τὸ φάντασμα ἐν τῇ ψυ-  
 11 χῇ, τῶν δ' οὐχ ἄπτεται.  
 11 ἄλλ' εἰ δὴ τοιοῦτόν ἐστι τὸ συμ-  
 βαῖνον περὶ τὴν μνήμην, πότερον τοῦτο μνημονεύει τὸ πάθος  
 ἢ ἐκεῖνο ἀφ' οὗ ἐγένετο; εἰ μὲν γὰρ τοῦτο, τῶν ἀπόντων οὐδὲν ἂν  
 μνημονεύομεν· εἰ δ' ἐκεῖνο, πῶς αἰσθανόμενοι τούτου μνημο-  
 15 νέομεν, οὗ μὴ αἰσθανόμεθα, τὸ ἀπόν; εἰ τ' ἐστὶν ὅμοιον ὥσπερ

450a26. τοῦ μὲν πάθους] μὲν τοῦ πάθους *C<sup>c</sup>Mi* : quidem passionem  $\Gamma^1$  : quidem passione  $\Gamma^2$  || 450a27. ἀπόντος] μὴ παρόντος *X* || μνημονεύει] μνημονεύεται *avZ<sup>a</sup>* || μὴ] *om. U* || 450a28. τοιοῦτον τὸ] τοιοῦτο τὸ *E<sup>1</sup>* : τοῦτον τὸ *O<sup>2</sup>S* : τοιοῦτό τι τὸ *C<sup>c</sup>Mi* : τοιοῦτον *Rassow* || 450a29. αὐτήν] *animam*  $\Gamma^1$  || 450a29-30. ζωγράφημά] *animalium pictura*  $\Gamma^1$  || 450a30. τὸ πάθος] *del. Ross* || εἶναι μνήμην] μνήμην εἶναι *aUT<sup>1</sup>* || 450a31. ἐνσημαίνεται] *unum significat*  $\Gamma^1$  || 450a31-32. τοῦ αἰσθήματος] τὸ αἶσθημα *C<sup>c</sup>Mi $\Gamma^1$*  : sensibilis  $\Gamma^2$  || 450a32. τοῖς δακτυλίοις] τοῖς δακτύλοις *iC<sup>c</sup>MLX* || 450b1. πάθος] τὸ πάθος *X<sup>2</sup>Nv* || 450b2. μνήμη] *om. P* || ἂν] *aqUO<sup>d</sup>vZ<sup>a</sup>mPT<sup>2</sup>* : *om. S $\Gamma^1$ (ut v.)* : γὰρ *N* || 450b3. τοῖς δὲ] *in aliis*  $\Gamma^1$  : *aliis quidem*  $\Gamma^2$  || ψήχεσθαι] ψύχεσθαι *iYbVC<sup>c</sup>MiH<sup>a</sup>mP* *Mich<sup>p</sup>* : frigidum esse  $\Gamma^1$  : frigida esse  $\Gamma^2$  || 450b4. τῶν οἰκοδομημάτων] *edificiorum sunt*  $\Gamma^1$  || 450b5. τοῦ δεχομένου τὸ πάθος] τοῦ πάθους *Xm* || 450b6. εἰσιν] *om. \Gamma^2* || ῥέουσιν] *fluunt et*  $\Gamma^1$  || 450b8. καὶ οἱ λίαν<sub>2</sub>] καὶ *\beta C<sup>c</sup>Mi $\Gamma^1$*  : ἢ *PT<sup>2</sup>* || 450b8-9. φαίνονται] ὡς ἐπὶ τὸ πολὺ φαίνονται *C<sup>c</sup>Mi $\Gamma^1$*  || 450b9. μνήμονες] μνημονικοὶ ὄντες *C<sup>c</sup>Mi* : μνήμονες [...] *O<sup>d</sup>(incertum)* || εἰσιν ὑγρότεροι τοῦ δέοντος] *indigentū humidiores sunt*  $\Gamma^1$  : plus oportuno humidiores sunt  $\Gamma^2$  || 450b10. οὖν] *om. \Gamma^1* || 450b11. δὴ] *om. i\Gamma^1* : quidem  $\Gamma^2$  || 450b12. τὸ πάθος] *passio sit*  $\Gamma^1$  || 450b13. γὰρ] *om. EYb<sup>1</sup>V* || ἀπόντων] ἀπάντων *C<sup>c</sup>Mi $\Gamma^1$*  || οὐδέν] οὐθέν *P* || ἂν] *om. EYbZ<sup>c</sup>\Gamma^1* || 450b14. τούτου] τοῦτο *a\theta P* || 450b15. τὸ ἀπόν] τὸ ἀτοπον *P* : *presens*  $\Gamma^1$

Now, one might raise the difficulty how you remember that which is not present, since it is the affection<sup>10</sup> that is present, while the thing is absent. For clearly one must think about that which is so generated through sensation in the soul, that is, in that part of the body which contains it,<sup>11</sup> as a sort of picture, and the state of having this we call “memory”; for the movement produced stamps almost a sort of impression of the sense-impression, similar to what is done by people using their seals. This is also the reason why {450b} those who are in much movement<sup>12</sup> because of an affection or because of age do not come to have memory, as though the movement produced by sensation and the seal were impinged on running water, while others do not receive the impression because of damage in that which is receiving the affection—similar to the damage of old walls in buildings—and because of the hardness in it. Therefore, both the very young and old people have weak memories: for the former are fluctuating because of growth, the latter because of decay. Similarly neither those people that are too quick-witted nor those that are too slow-witted seem to possess a good memory: the former are moister than what is needed, the latter are harder; thus the image does not remain in the soul of the former, while it does not make real contact<sup>13</sup> with the latter.

But if this is the sort of thing that happens in the case of memory, is it, then, this affection that one remembers, or is it the object from which the affection came to be? For if we remember the affection produced by the object, we would not remember anything that was absent, but if it is the object that produced this affection that we remember, how do we, in sensing the affection, remember the absent object, which we do not now sense?<sup>14</sup> And if the affection is something similar to an impression

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<sup>10</sup> “affection”] Here and occasionally in the following, “affection” (πάθος) refers not to memory but to the state induced by sensation or perception.

<sup>11</sup> “contains it”] The pronoun αὐτήν is grammatically capable of referring both to “sensation” and “the soul”. Most scholars and translators prefer the latter, which may be supported by *MA*. 703a36–b1, but see *GA*. 734b24–27.

<sup>12</sup> “movement”] Aristotle refers to inner movement.

<sup>13</sup> “make real contact”] This is the translation of ἀπτεται. Certainly, it indicates more than just “touch” in this passage.

<sup>14</sup> “which we do not now sense”] For the object belonged to the past and is therefore gone now. Otherwise we would still perceive it, and then it would not be a case of remembering.

τύπος ἢ γραφή ἐν ἡμῖν, ἢ τούτου [αὐτοῦ] αἰσθησις διὰ τί ἂν  
 εἶη μνήμη ἑτέρου, ἀλλ' οὐκ αὐτοῦ τούτου; ὁ γὰρ ἐνεργῶν τῇ  
 18 μνήμῃ θεωρεῖ τὸ πάθος τοῦτο καὶ αἰσθάνεται τούτου.  
 18 πῶς οὖν  
 τὸ μὴ παρὸν μνημονεύσει; εἶη γὰρ ἂν καὶ ὁρᾶν τὸ μὴ παρὸν  
 20 καὶ ἀκούειν. ἢ ἔστιν ὥς ἐνδέχεται καὶ συμβαίνει τοῦτο; οἶον  
 γὰρ τὸ ἐν τῷ πίνακι γεγραμμένον ζῶον καὶ ζῶον ἐστὶ καὶ εἰ-  
 κών, καὶ τὸ αὐτὸ καὶ ἐν τοῦτ' ἐστὶν ἄμφω, τὸ μέντοι εἶναι  
 οὐ ταῦτόν ἄμφοιν, καὶ ἔστι θεωρεῖν καὶ ὥς ζῶον καὶ ὥς εἰ-  
 κόνα, οὕτω καὶ τὸ ἐν ἡμῖν φάντασμα δεῖ ὑπολαβεῖν καὶ  
 25 αὐτό τι καθ' αὐτό εἶναι καὶ ἄλλου [φάντασμα]. ἢ  
 μὲν οὖν καθ' αὐτό, θεώρημα ἢ φάντασμά ἐστιν, ἢ δ' ἄλλου,  
 οἶον εἰκὼν καὶ μνημόνευμα. ὥστε καὶ ὅταν ἐνεργῇ ἢ κίνησις  
 αὐτοῦ, ἂν μὲν ἢ καθ' αὐτό ἐστὶ ταύτῃ αἰσθάνηται ἢ ψυχῇ  
 αὐτοῦ, οἶον νόημά τι ἢ φάντασμα φαίνεται ἐπελθεῖν ἂν δ'  
 30 ἢ ἄλλου καὶ ὥσπερ ἐν τῇ γραφῇ ὥς εἰκόνα θεωρεῖ καί, μὴ  
 ἑώρακώς τὸν Κορίσκον, ὥς Κορίσκου, ἐνταυθὰ τε ἄλλο τὸ  
 πάθος τῆς θεωρίας ταύτης καὶ ὅταν ὥς ζῶον γεγραμμένον  
 451a θεωρῇ, ἔν τε τῇ ψυχῇ τὸ μὲν γίνεται ὥσπερ νόημα μόνον,  
 τὸ δ' ὥς ἐκεῖ ὅτι εἰκὼν, μνημόνευμα. καὶ διὰ τοῦτο ἐνίστο'  
 οὐκ ἴσμεν, ἐγγιγνομένων ἡμῖν ἐν τῇ ψυχῇ τοιοῦτων κινήσεων

450b16. τύπος ἢ γραφή] *figura aut pictura*  $\Gamma^1\Gamma^2$  || ἐν ἡμῖν] *om.*  $\Gamma^1$  || ἢ τούτου [αὐτοῦ] αἰσθησις] *Ross duce Freudenthal* : ἢ τούτου αὐτοῦ αἰσθησις *C'MiXU* : τούτου αὐτοῦ ἢ αἰσθησις *EYbV* : εἰ τούτου αὐτοῦ αἰσθησις *LH^aO^4Sim* : ἢ τούτου αὐτοῦ αἰσθησις *P* : huius eiusdem sensus  $\Gamma^1$  : huius ipsius sensus  $\Gamma^2$  || 450b17–18. ὁ (l. 17)–τούτου (l. 18)] *om.*  $\Theta$  || 450b18. τὸ πάθος τοῦτο] *hanc passionem*  $\Gamma^1\Gamma^2$  || 450b20. συμβαίνει] *συμβαίνειν Ross* || 450b21. τῷ] *om.*  $\mu C'Mi$  || γεγραμμένον ζῶον] *γεγραμμένον Bekker (!)* || ἐστὶ καὶ] *καὶ Mich^c* : est  $\Gamma^1$  || 450b22. καί] *om.* *EYbV* || καὶ ἐν] *ἐν καὶ δὲν P* || τοῦτ' ἐστὶν ἄμφω] *ἄμφω ταῦτ' ἐστὶν C'Mi* : αὐτὸ ἐστὶν ἄμφω  $\Theta V^2O^4SNmP$  : ταῦτ' ἐστὶν ἄμφω *U* : *hec utraque sunt*  $\Gamma^1$  : *ipsa sunt ambo*  $\Gamma^2$  || 450b23. ἄμφοιν] *est utrisque*  $\Gamma^1$  || 450b25. τι καθ' αὐτό εἶναι] *καθ' αὐτό εἶναι EYbV* : εἶναι τι καθ' αὐτό *C'MiUT^1* || καὶ] *θεώρημα καὶ α\Gamma^1* : τι καὶ  $V^2P$  || φάντασμα] *del. Freudenthal* || 450b26. μὲν οὖν] *quidem*  $\Gamma^2$  || ἐστὶν] *om.* *C'Miz^1* || 450b27. καί] *ἐκεῖ Freudenthal* || 450b28. μὲν] *om.* *P* || ἢ] *ἢ EYbC'MX* : *id quod*  $\Gamma^1$  || ἐστὶ] *om.*  $\Gamma^2$  || αἰσθάνηται] *αἰσθάνηται EYbV* || 450b29. νόημά τι ἢ φάντασμα] *intellectus quidam aut fantasia*  $\Gamma^1$  || ἐπελθεῖν] *ἐπελθὼν LH^a, fort. recte* || 450b29–30. δ' ἢ] *δ' ἢ EYb* || 450b30. καὶ ὥσπερ] *ὥσπερ α\Gamma^1* || ὥς εἰκόνα] *ὥς εἰκὼς Xv* || 450b31. ὥς Κορίσκου] *ὥς Κορίσκου U(ex -ou corr.)NmP* : *aut tonsoris ymaginem*  $\Gamma^1$  : *ut Corisci ymaginem*  $\Gamma^2$  || ἐνταυθὰ (l. 450b31)–μνημόνευμα (l. 451a2)] *susp. Freudenthal* || τε] *om.* *C'Mi* || ἄλλο] *ἕτερον Mich^c* || 450b32. τῆς θεωρίας ταύτης] *speculationis huius est*  $\Gamma^1$  : *huius speculationis*  $\Gamma^2$  || καί] *et alia*  $\Gamma^1$  || 451a1. ἐν τε] *τὸ ἐν α* : *ἐν γε X* : *τῶν δὲ ἐν P* || ὥσπερ] *sicut est*  $\Gamma^1$  : *om.*  $\Gamma^2$  || μόνον] *om.* *Mich^1(16.13, sed variant codd. et cf. 16.21)* || 451a2. εἰκὼν] *εἰκὼν καὶ E^3YbVN* || μνημόνευμα] *α\beta P\Gamma^2 Mich^1* : *memoria est*  $\Gamma^1$  || 451a3. ἐγγιγνομένων] *γγιγνομένων*  $\Theta O^4SNm$  *Mich^1/p* || ἡμῖν ἐν τῇ ψυχῇ] *ἐν τῇ ψυχῇ ἡμῖν P* : *ἐν τῇ ψυχῇ Mich^1* : *in anima nostra*  $\Gamma^1$

or an inscription in us, why should the sensation of this be memory of something else, but not of this itself?<sup>15</sup> For the man who actualises his memory contemplates this affection and this is what he senses.

How, then, will he remember what is not there? For on this line of thought, it might also then be possible to see and hear what is not there. Or is it rather so that this kind of case is not only possible but does in fact happen? For just as the picture painted<sup>16</sup> on a board is both a picture and a representation, and this being the same and one is both, although the being is not the same for both, and just as it is possible to contemplate it both as a picture and as a representation, so it must also be assumed that the image in us is both something in itself and of something else.<sup>17</sup> Thus, qua something in itself, the affection is a contemplation and an image, and qua being of something else it is something like a representation and a memory impression. Hence, when the movement of the affection actualises, it seems to occur as a thought or an image, if the soul senses it in so far that it is something in itself; but if the soul senses it in so far that it is of something else, and in the way you contemplate something in a picture as a representation, for instance, like a representation of Coriscus, even when you have not actually seen Coriscus, then the affection of this contemplation is different from the affection occurring when you contemplate as a picture in a painting: {451a} the latter arises in the soul only as a thought, while the other is a memory impression, since it is, like in the example of the painting, a representation. And because of this we sometimes do not know, when such movements occur in our soul from

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<sup>15</sup> “And if—of this itself”] Aristotle is asking the following question: When we sense in ourselves the affection produced by the original object, why is our memory then of something else (namely, the object), but not of this affection in its own right?

<sup>16</sup> For a more general translation of ζῷον than just “animal”, cf. also Plat., *Gorg.* 453c–d; *Resp.* 514c–515a; Arist., *Cat.* 1a1–6. Most interpreters translate ζῷον as “picture” in the present passage, but it should be noted that the translation “animal” is not impossible.

<sup>17</sup> “of something else”] That is, “a representation of something else.”



- ἀπὸ τοῦ αἰσθάνεσθαι πρότερον, εἰ κατὰ τὸ ἡσθηθῆναι συμβαί-  
 5 νει, καὶ εἰ ἔστι μνήμη ἢ οὐ διστάζομεν ἐνίστε· ὅτε δὲ συμβαίνει  
 ἐννοῆσαι καὶ ἀναμνησθῆναι ὅτι ἡκούσαμεν τι πρότερον ἢ  
 εἶδομεν· τοῦτο δὲ συμβαίνει, ὅταν θεωρῶν ὡς αὐτὸ μετα-  
 8 βάλλῃ καὶ θεωρῇ ὡς ἄλλου.
- 8 γίγνεται δ' ἐνίστε καὶ τοῦναντίον, οἷον  
 συνέβη Ἀντιφέροντι τῷ Ὁρείτῃ καὶ ἄλλοις ἐξισταμένοις·  
 10 τὰ γὰρ φαντάσματα ἔλεγον ὡς γενόμενα καὶ ὡς μνημο-  
 νεύοντες. τοῦτο δὲ γίγνεται, ὅταν τις τὴν μὴ εἰκόνα ὡς εἰ-  
 12 κόνα θεωρῇ.
- 12 αἱ δὲ μελέται τὴν μνήμην σώζουσι τῷ ἐπανα-  
 μμνήσκειν· τοῦτο δ' ἐστὶν οὐδὲν ἕτερον ἢ τὸ θεωρεῖν πολλὰ-  
 14 κας ὡς εἰκόνα καὶ μὴ ὡς καθ' αὐτό.
- 14 τί μὲν οὖν ἐστὶ μνήμη  
 15 καὶ τὸ μνημονεύειν, εἴρηται, ὅτι φαντάσματος, ὡς εἰκόνας  
 οὗ φάντασμα, ἕξις, καὶ τίνος μορίου τῶν ἐν ἡμῖν, ὅτι τοῦ  
 πρώτου αἰσθητικοῦ καὶ ὃ χρόνου αἰσθανόμεθα.

451a4. ἀπὸ] εἰ ἀπὸ *C<sup>c</sup>MiΓ<sup>1</sup>* || αἰσθάνεσθαι] αἰσθεσθαι *μΝ* || εἰ] *ηἰ* *E* : ἢ *ΥV<sup>1</sup>C<sup>c</sup>MiΓ<sup>1</sup>* ||  
 451a5. εἰ] *om.* *E<sup>1</sup>C<sup>c</sup>MiΓ<sup>1</sup>* || μνήμη] ἢ μνήμη *μ* || ἢ] *om.* *E<sup>1</sup>* || διστάζομεν ἐνίστε· ὅτε δὲ]  
 διστάζομεν· ὅτε δὲ *EYV* : ἐνίστε δὲ *C<sup>c</sup>Mi* : διστάζομεν· ὅτε δὲ ἐνίστε *S* : ἐνίστε διστάζομεν  
 ὅτε δὲ *U* : *dubitamus quandoque. aliquando autem Γ<sup>1</sup>Γ<sup>2</sup>* || 451a7. εἶδομεν] ἴδομεν  
*EYbV<sup>1</sup>* || ὡς] *om.* *P* : *tanquam Γ<sup>1</sup>Γ<sup>2</sup>* || 451a7–8. μεταβάλλῃ] μεταβάλλῃ *C<sup>c</sup>Mi* : μεταβάλλει  
*U* || 451a8. θεωρῇ] θεωρεῖ *EYbU* || ὡς ἄλλου] ὡς εἰκόνα ἄλλου *P* : *sicut alius esse Γ<sup>1</sup>* ||  
 451a8. δ' ἐνίστε καὶ τοῦναντίον] δὲ καὶ τοῦναντίον *EYbV<sup>1</sup>* : δὲ καὶ τοῦναντίον ἐνίστε *quoniam P*  
*Mich<sup>1/c</sup>* || 451a9. συνέβη] συμβαίνει *X* || Ὁρείτῃ] Ὁρείτῃ *avm* || ἄλλοις ἐξισταμένοις]  
*aliis extasim passis Γ<sup>2</sup> : incerta lectio Γ<sup>1</sup>* || 451a10. φαντάσματα] φανέντα αὐτοῖς *C<sup>c</sup>MiΓ<sup>1</sup>* ||  
 γενόμενα] γινόμενα *C<sup>c</sup>Mi* || 451a11. τις τὴν μὴ] τὸ παρ' αὐτὴν *EYb* : τις τὴν *C<sup>c</sup>MiH<sup>a</sup>* :  
 τις τὴν παρ' αὐτὴν *V<sup>2</sup>* : *aliquis Γ<sup>1</sup>* : *aliquis non Γ<sup>2</sup>* || 451a11–12. ὡς εἰκόνα] ὡς μὴ εἰκόνα  
*H<sup>a</sup>* : *tamquam ymaginet Γ<sup>1</sup>* || 451a12–14. αἱ δὲ (l. 12)–καθ' αὐτό (l. 14)] *an verba in l. 8*  
*(post ὡς ἄλλου) transponenda?* || 451a12–13. τῷ ἐπαναμμνήσκειν] ἐν τῷ ἐπαναμμνήσκειν  
*U* || 451a14. μνήμη] ἢ μνήμη *μ* || 451a15. εἴρηται] *om.* *m* || φαντάσματος] φαντάσματα  
*Θ<sup>4</sup>Sζ<sup>a</sup>* : φάσματος *φ* : *fantasmatis est Γ<sup>1</sup>* : *fantasmatis Γ<sup>2</sup>* || ὡς εἰκόνας] ὡς εἰκὸς *Xb* : *sicut*  
*ymaginis et Γ<sup>1</sup>* : *ut ymaginis Γ<sup>2</sup>* || 451a16. οὗ φάντασμα] *an φάντασμα delendum?* || τίνος  
 μορίου] *cuius partium Γ<sup>1</sup>* || 451a17. καὶ ὃ] καὶ οὐ *EYb* : καὶ οὐ *C<sup>c</sup>Mi* : *quod Γ<sup>1</sup>*

the fact that we were sensing earlier, whether it happens in accordance with something that we have sensed, and we are sometimes in doubt whether it is memory or not; but occasionally it happens that we come to think and recollect that we have heard or seen something earlier; and this is what happens, when, contemplating something as something in itself, you make a switch<sup>18</sup> and contemplate it as a representation of something else.

But sometimes the opposite also occurs, as it did, for instance, to Antipheron of Oreus<sup>19</sup> and to other unstable people; for they spoke of their images as having actually happened and as remembering them. And this situation occurs when one contemplates as a representation what is not actually a representation.

Now, exercises preserve the memory by repeated reminding; and this is nothing else than often contemplating the image as a representation and not as something in itself.

We have now stated what memory and remembering is, that it is the state of having an image, taken as a representation of that of which it is an image;<sup>20</sup> further, we have stated to which of the parts in us it belongs, viz. that it is to the primary faculty of sense, that is, to that faculty by which we sense time.

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<sup>18</sup> “make a switch”] This is the translation of the Greek μεταβάλλη. Aristotle refers to the case of changing the way one views the image.

<sup>19</sup> “Antipheron of Oreus”] Besides the information given by the *De memoria*, nothing is known for certain about this man, cf. Ross (1955) 239. Oreus (Ὀρεός) is located on the island of Euboea.

<sup>20</sup> “that it is—the image is of”] The final definition of memory.

Περὶ δὲ τοῦ ἀναμνησθεσθαι λοιπὸν εἰπεῖν. πρῶτον μὲν  
οὖν ὅσα ἐν τοῖς ἐπιχειρηματικοῖς λόγοις ἐστὶν ἀληθῆ, δεῖ τι-  
20 θέναι ὡς ὑπάρχοντα. οὔτε γὰρ μνήμης ἐστὶν ἀνάληψις ἢ  
ἀνάμνησις οὔτε λήψις· ὅταν γὰρ τὸ πρῶτον ἢ μάθη ἢ πά-  
θη, οὔτ' ἀναλαμβάνει μνήμην οὐδεμίαν (οὐδεμία γὰρ προγέ-  
γονεν) οὔτ' ἐξ ἀρχῆς λαμβάνει· ὅταν δ' ἐγγένηται ἢ ἕξις  
ἢ τὸ πάθος, τότε μνήμη ἐστίν. ὥστε μετὰ τοῦ πάθους ἐγ-  
25 γιγνομένου οὐκ ἐγγίγνεται. ἔτι δ' ὅτε τὸ πρῶτον ἐγγέγονε τῷ  
ἀτόμῳ καὶ ἐσχάτῳ, τὸ μὲν πάθος ἐνυπάρχει ἤδη τῷ πα-  
θόντι καὶ ἡ ἐπιστήμη (εἰ δεῖ καλεῖν ἐπιστήμην τὴν ἕξιν ἢ τὸ  
πάθος—οὐθὲν δὲ κωλύει κατὰ συμβεβηκὸς καὶ μνημονεύειν  
ἐνια ὧν ἐπιστάμεθα)· τὸ δὲ μνημονεύειν καθ' αὐτὸ οὐκ ὑπάρ-  
30 χει πρὶν χρονισθῆναι· μνημονεύει γὰρ νῦν ὁ εἶδεν ἢ ἔπαθε  
31 πρότερον, οὐχ ὁ νῦν ἔπαθε, νῦν μνημονεύει.  
31 ἔτι δὲ φανερόν  
451b ὅτι μνημονεύειν ἔστι μὴ νῦν ἀναμνησθέντα, ἀλλ' ἐξ ἀρχῆς  
αἰσθόμενον ἢ παθόντα. ἀλλ' ὅταν ἀναλαμβάνῃ ἦν πρότερον  
εἶχεν ἐπιστήμην ἢ αἰσθησιν ἢ οὐ ποτὲ τὴν ἕξιν ἐλέγομεν  
μνήμην, τοῦτ' ἐστὶ καὶ τότε τὸ ἀναμνησθεσθαι τῶν εἰ-  
5 ρημένων τι, †τὸ δὲ μνημονεύειν συμβαίνει καὶ μνήμη ἀκο-

451a18. εἰπεῖν] dicere est  $\Gamma^1$  || 451a19. οὖν] *om.*  $v\Gamma^1\Gamma^2$  || ἐστὶν ἀληθῆ] εἰσὶν ἀληθῆ  $O^dS$  : vera sunt  $\Gamma^1\Gamma^2$  || 451a19–20. τιθέναι] τίθεσθαι *av\zeta^a* || 451a20. ὡς ὑπάρχοντα] sicut sunt  $\Gamma^1$  : ut existencia  $\Gamma^2$  || οὔτε] οὐδὲ  $\alpha$  : non  $\Gamma^1\Gamma^2$  || ἢ] que est  $\Gamma^1$  || 451a21. γὰρ] *an* μὲν γὰρ *scribendum?* || ἦ] *om.*  $\alpha\Gamma^1\Gamma^2$  Mich<sup>c</sup> || 451a21–22. μάθη ἢ πάθη] πάθη ἢ μάθη  $\zeta^a$  Mich<sup>c</sup> || 451a23. δ'] *N et Bekker* : γὰρ  $\alpha\mu\omega\zeta^amPT\Gamma^2$  : *om.* Mich<sup>c</sup>(21.14) || ἐγγένηται] γέννηται  $\rho\mu NmP$  Mich<sup>c</sup> || 451a24. ἦ] καὶ  $\alpha\omega\zeta^a\Gamma^1$  || μνήμη] ἢ μνήμη  $\alpha P$  || 451a25. τι *ante* τὸ *vel ante* τῷ *inseri vult Freudenthal* || ἐγγίγνεται] ἐγγίγνεσθαι  $X$  : fit  $\Gamma^1$  || ἔτι] ὅτι  $E\Gamma bV$ (*incerta quaedam in marg.*) || ἐγγέγονε τῷ] ἐγγέγονε ἐν τῷ  $\beta b^2(p.c.)P$  Mich<sup>1/c</sup> : facta est in  $\Gamma^1\Gamma^2$  || 451a26. ἀτόμῳ καὶ ἐσχάτῳ] ἐσχάτῳ καὶ ἀτόμῳ  $LH^a$  || 451a27–28. τὴν ἕξιν ἢ τὸ πάθος] τὸ πάθος ἢ τὴν ἕξιν  $P$  || 451a28. καὶ] *om.*  $\Gamma^2$  Mich<sup>c</sup> || 451a29. ὧν] *om.*  $\Gamma^1$  || 451a29–30. ὑπάρχει] ὑπάρξει  $E^1C^cMi$  || 451a30. πρὶν] πλὴν  $P$  || ὁ εἶδεν] que audit aut vidit  $\Gamma^2$  || ἔπαθε] ὁ ἔπαθε  $H^a$  || 451a31. δὲ] *om.*  $\alpha O^dS\Gamma^1\Gamma^2$  || φανερόν] φανερόν ἐστι  $\zeta^a\Gamma^1$  || 451b1. ἀλλ'] *om.*  $\beta P$  Mich<sup>1</sup> || 451b2. αἰσθόμενον] αἰσθανόμενον  $\alpha H^aP$  || ἦ] μὴ  $E\Gamma bV^1$  || παθόντα] παθόντα  $V^2O^dS$  : μαθόντα  $\tau\iota C^cMi\Gamma^1$  : *post* παθόντα *lacunam esse cens. Freudenthal* || ἀναλαμβάνῃ] ἀναλάβῃ  $C^cMi$  : ἀναλαμβάνει  $P$  || 451b3. ἦ] *om.*  $\Gamma^1$  || 451b3–4. ἐλέγομεν μνήμην] diximus esse memoriam  $\Gamma^1$  : memoriam diximus  $\Gamma^2$  || 451b4. μνήμην, τοῦτ' ἐστὶ] μνήμην τούτων μὲν  $EY$  : εἶναι μνήμην, τοῦτ' ἐστὶ  $C^cMi\Gamma^1$  || τότε τὸ] τοῦτο  $S$  : τότε  $\rho\mu C^cMiNmP$  || ἀναμνησθεσθαι] ἀναμνησθεσθαί ἐστι  $\alpha\Gamma^1\Gamma^2$  || 451b4–5. τῶν εἰρημένων] non eorum que dicta sunt  $\Gamma^1\Gamma^2$  || 451b5. τι, †τὸ δὲ] τι, τῷ δὲ *m, prob. Ross* || 451b5–6. καὶ μνήμη ἀκολουθεῖ] καὶ ἡ μνήμη ἀκολουθεῖ  $\alpha$  : καὶ μνήμην ἀκολουθεῖν  $LH^am$  : καὶ μνήμη ἀκολουθεῖν  $XN$  : καὶ ἡ μνήμη ἀκολουθεῖν  $\zeta^aP$  : *an delendum?*

## Chapter 2

It now remains to talk about recollecting. First, then, we must assume as the foundation the truths stated in the preliminary discussions.<sup>21</sup> For recollection is neither the recovery of memory, nor the original acquisition of it; for when one first learns or experiences something, he neither recovers any memory (since there had been no memory there before), nor does he acquire it for the first time; but when the state of having or the affection is produced in the person, then it is memory. Thus, memory is not produced simultaneously with the affection that is produced in the person. Furthermore, when the affection has first been produced in that which is indivisible and ultimate,<sup>22</sup> then this affection and the knowledge (if one ought to call the state of having or the affection by the name of “knowledge”—and actually there is nothing to prevent that we also accidentally remember some things of which we have knowledge) are already present in the person who suffered the experience; however, remembering does not essentially exist before some time has elapsed; for a person remembers now what he saw or experienced earlier; he does not remember now what he experienced now.

Furthermore, it is clear {451b} that one can remember things, even though he has not just now recollected them, but has sensed or experienced them for the first time. But when he recovers the knowledge, sensation or some other previous experience, the having state of which we call memory, then this is to recollect one of the named objects, †and remembering occurs and memory follows.†<sup>23</sup> Even this does not apply

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<sup>21</sup> “the preliminary discussions”] These discussions are either chapter 1 of the *De memoria* or one or more lost exoteric works.

<sup>22</sup> “that which is indivisible and ultimate”] That is (presumably), “in the indivisible and ultimate instant.” Ross, following Sophonias, refers the phrase to the primary organ of sense, but this seems an unlikely description of the sense. His reference to *Sens.* 449a16–18 is not sufficient to establish his point.

<sup>23</sup> “†and—follows†”] This passage is, I believe, corrupt. At least, it cannot be taken literally, since memory does *not* necessarily follow upon recollecting.

λουθεῖ.† οὐδὲ δὴ ταῦτα ἀπλῶς, ἐὰν ἔμπροσθεν ὑπάρξαντα πά-  
 λιν ἐγγίγνηται, ἀλλ' ἔστιν ὥς, ἔστι δ' ὥς οὐ. δις γὰρ μαθεῖν  
 καὶ εὐρεῖν ἐνδέχεται τὸν αὐτὸν τὸ αὐτό· δεῖ οὖν διαφέρειν  
 τὸ ἀναμνησκέσθαι τούτων, καὶ ἐνούσης πλείονος ἀρχῆς ἢ ἐξ  
 10 ἧς μανθάνουσιν ἀναμνησκέσθαι.

10 συμβαίνουσι δ' αἱ ἀναμνη-  
 σεις, ἐπειδὴ πέφυκεν ἡ κίνησις ἥδε γενέσθαι μετὰ τήνδε· εἰ  
 μὲν ἐξ ἀνάγκης, δῆλον ὥς ὅταν ἐκείνη κινήθῃ, τήνδε κινή-  
 θήσεται· εἰ δὲ μὴ ἐξ ἀνάγκης ἀλλ' ἔθει, ὥς ἐπὶ τὸ πολὺ  
 κινήθεται. συμβαίνει δ' ἐνίας ἀπαξ ἐθισθῆναι μᾶλλον ἢ  
 15 ἐτέρως πολλάκις κινουμένους· διὸ ἔνια ἀπαξ ἰδόντες μᾶλλον  
 μνημονεύομεν ἢ ἕτερα πολλάκις. ὅταν οὖν ἀναμνησκώμε-  
 θαι, κινούμεθα τῶν προτέρων τινὰ κινήσεων, ἕως ἂν κινήθω-  
 μεν μεθ' ἣν ἐκείνη εἶωθεν. διὸ καὶ τὸ ἐφεξῆς θηρεύομεν νοή-  
 σαντες ἀπὸ τοῦ νῦν ἢ ἄλλου τινός, καὶ ἀφ' ὁμοίου ἢ ἐναντίου ἢ  
 20 τοῦ σύνεγγυς. διὰ τοῦτο γίγνεται ἡ ἀνάμνησις· αἱ γὰρ κινή-  
 σεις τούτων τῶν μὲν αἱ αὐταί, τῶν δ' ἅμα, τῶν δὲ μέρος  
 22 ἔχουσιν, ὥστε τὸ λοιπὸν μικρὸν ὃ ἐκινήθη μετ' ἐκείνο.

22 ζητοῦσι  
 μὲν οὖν οὕτω, καὶ μὴ ζητοῦντες δ' οὕτως ἀναμνησκονται, ὅταν

451b6. ὑπάρξαντα] ὑπάρξασα *EIVV<sup>1</sup>* || 451b7. ἐγγίγνηται] ἐγγένεται α : ἐγγίγνεται *P* ||  
 451b8. καὶ εὐρεῖν ἐνδέχεται] ἐνδέχεται καὶ εὐρεῖν *quMP* || τὸν αὐτὸν τὸ αὐτό] τὸ αὐτὸ τὸν  
 αὐτὸν *μC<sup>c</sup>MiΓ<sup>1</sup>* || οὖν] γὰρ *Mich<sup>c</sup>* || 451b9. τὸ ἀναμνησκέσθαι] τὴν ἀνάμνησιν *Mich<sup>c</sup>* ||  
 ἢ] καὶ *E<sup>1</sup>* || 451b10. μανθάνουσιν] μανθάνει *ρΖ<sup>am</sup>* || ἀναμνησκέσθαι] *ipsam reminisci*  
*Γ<sup>1</sup>* || 451b11. ἐπειδὴ πέφυκεν ἡ κίνησις ἥδε γενέσθαι] *Ζ<sup>a</sup> et Bekker* : γενέσθαι *EIVV<sup>1</sup>* :  
 ἐπειδὴ πέφυκεν ἥδε ἡ κίνησις *μC<sup>c</sup>MiΓ<sup>1</sup>* : ἐπειδὴ πέφυκεν ἡ κίνησις ἥδε *quN* : ἐπειδὴ  
 πέφυκεν ἡ κίνησις ἥδη *P* : *quoniam aptus natus est hic motus iam* *Γ<sup>2</sup>* || 451b12. μὲν]  
 μὲν γὰρ *ρΖ<sup>am</sup>PT<sup>2</sup>* || ἐκείνην κινήθῃ] ἐκείνη κινήθῃ *αN* : ἐκείνη βοηθῇ *L* : κινήθῃ ἐκείνη  
*H<sup>a</sup>* || τήνδε] τήνδε τὴν κίνησιν *αΓ<sup>1</sup>* || 451b12–13. κινήθεται] κινήσεται *P* || 451b13–14.  
 εἰ (l. 13)–κινήθεται (l. 14)] *om. X<sup>1</sup>* || 451b13. εἰ δὲ] *sed ideo* *Γ<sup>1</sup>* || ἀλλ' ἔθει] *om. P* ||  
 451b14. δὲ] *om. Mich<sup>c</sup>* || ἐνίας ἀπαξ] *Freudenthal* : ἐνίους ἀπαξ *αριμNimPT<sup>1</sup>Γ<sup>2</sup>* *Mich<sup>c</sup>* :  
 ἀπαξ ἔνια *U<sup>1</sup>*(γράφεται) : *incertum O<sup>d</sup>* || μᾶλλον] θάπτον *E<sup>1</sup>V<sup>1</sup>C<sup>c</sup>MiΓ<sup>1</sup>Γ<sup>2</sup>* || 451b15. ἐτέρως]  
*Freudenthal* : ἄλλους α : ἐτέρους β *P Mich<sup>c</sup>* : ἕτερα *U<sup>1</sup>*(γράφεται) || πολλάκις κινουμένους]  
 κινουμένους πολλάκις *Mich<sup>c</sup>* : πολλάκις κινουμένας *Freudenthal* || ἀπαξ ἰδόντες] ἰδόντες  
 ἀπαξ *quM* || 451b16. ἕτερα] ἕτεροι *EIVV* : ἕτερον *O<sup>d</sup>S* || 451b17. τῶν προτέρων τινὰ  
 κινήσεων] τῶν πρότερον τινὰ κινήσεων *EIVVO<sup>d</sup>* τῶν ποτέρων τινὰς κινήσεων *Freudenthal*  
 || 451b17–18. κινήθωμεν] κινήθῃ *C<sup>c</sup>MiΓ<sup>1</sup>* || 451b18. εἶωθεν] εἰώθει *C<sup>c</sup>Mi* || τὸ] *τῷ P* ||  
 451b18–19. νοήσαντες] *om. LH<sup>a</sup>X<sup>1</sup>* || 451b19. ἀπὸ τοῦ νῦν] *om. Γ<sup>1</sup>* || ἢ ἐναντίου ἢ] καὶ  
 ἐναντίου καὶ *αΓ<sup>1</sup>* || 451b20. διὰ τοῦτο γίγνεται ἡ ἀνάμνησις] *an delendum?* || 451b21. αἱ  
 αὐταί] αὐταί *E<sup>1</sup>* : ἑαυταί *S* || ἅμα] *similes sunt* *Γ<sup>1</sup>* : *an vox corrupta?* || 451b22. ἔχουσιν]  
 ἔχει *XN* || ὃ] *om. EIVV<sup>1</sup>Ζ<sup>a</sup>* || 451b22–23. ζητοῦσι μὲν οὖν οὕτω] *quare sic* *Γ<sup>1</sup>* || 451b23.  
 μὲν οὖν] μὲν *C<sup>c</sup>MiO<sup>d</sup>S* || ζητοῦντες] ζητοῦσι *E<sup>3</sup>YbVN* || οὕτως] ὅμως *G.A. Becker* ||  
 ἀναμνησκονται] ἀναμνησκέσθαι *X<sup>2</sup>N* : ἀναμνησκόμεθα *P*

absolutely in all cases where the objects formerly existed in the subject and are then produced again, but in some cases it is true, in others it is not. For it is possible that the same person learns and discovers the same thing twice, and thus recollecting must differ from learning and discovering, that is, recollecting must occur because of an immanent starting point that goes beyond that from which we learn.

Now, recollections occur when a particular movement naturally follows another particular movement: if it happens by necessity, then it is clear that, when you are moved by the former, you will also be moved by the latter; but if it does not happen by necessity but by habit, you will normally be moved.<sup>24</sup> However, it does happen that we are more familiar with movements that have occurred to us only once than with other movements that have occurred often; this is the reason why we remember some things better than others, although we have seen the former only once while we have often seen the latter. Hence, when we recollect, we are moved by some previous movements, until we are moved to the one, after which the one we need habitually occurs. This is also the reason why we hunt the next in the series, starting our thoughts from the present or from another point in time, and from something similar, from something contrary, or from something closely connected. This is how recollection occurs; for the movements from these are in some cases the same as those sought, in some cases simultaneous with them, and in some cases they comprise part of the sought, so that there was only a small remaining part in which one was moved after that.

In this way, then, men seek, and, even when not seeking, they recollect in this way, when the movement happens after another;<sup>25</sup> and

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<sup>24</sup> “you will normally be moved”] But there is the chance that the right movement may not follow; and in this regard habitual movements in recollection are distinguished from necessary movements.

<sup>25</sup> “In this way—after another”] On the interpretation of this passage, cf. Sorabji (2004<sup>2</sup>) 99.

- μεθ' ἑτέραν κίνησιν ἐκείνη γίγνεται· ὥς δὲ τὰ πολλὰ ἑτέρων  
 25 γενομένων κινήσεων οἷων εἵπομεν, ἐγένετο ἐκείνη. οὐδὲν δὲ δεῖ  
 σκοπεῖν τὰ πόρρω, πῶς μεμνήμεθα, ἀλλὰ τὰ σύνεγγυς·  
 δῆλον γὰρ ὥς ὁ αὐτός ἐστι τρόπος πως, ἴλέγει δὲ τὸ ἐφεξῆς, οὐ  
 προζητήσας οὐδ' ἀναμνησθεῖς†. τῷ γὰρ ἔθι ἀκολουθοῦσιν αἱ  
 30 κινήσεις ἀλλήλαις, ἥδε μετὰ τήνδε. καὶ ὅταν τοίνυν ἀνα-  
 μμνήσκεισθαι βούληται, τοῦτο ποιήσει· ζητήσει λαβεῖν ἀρχὴν  
 κινήσεως, μεθ' ἣν ἐκείνη ἔσται. διὸ τάχιστα καὶ κάλλιστα γίγ-  
 452a νονται ἀπ' ἀρχῆς αἱ ἀναμνήσεις· ὥς γὰρ ἔχουσι τὰ πράγμα-  
 τα πρὸς ἀλλήλα τῷ ἐφεξῆς, οὕτω καὶ αἱ κινήσεις. καὶ ἔστιν  
 εὐμνημόνευτα ὅσα τάξιν τινὰ ἔχει, ὥσπερ τὰ μαθήματα·  
 4 τὰ δὲ φαύλως καὶ χαλεπῶς.  
 4 καὶ τούτῳ διαφέρει τὸ ἀνα-  
 5 μμνήσκεισθαι τοῦ πάλιν μανθάνειν, ὅτι δυνήσεται πως δι'  
 αὐτοῦ κινήθηναί ἐπὶ τὸ μετὰ τὴν ἀρχήν. ὅταν δὲ μή, ἀλλὰ  
 δι' ἄλλου, οὐκέτι μέμνηται. πολλάκις δ' ἤδη μὲν ἀδυνατεῖ  
 ἀναμνησθῆναι, ζητεῖν δὲ δύναται καὶ εὐρίσκει. τοῦτο δὲ γίγ-  
 10 νεται κινεῖν πολλά, ἕως ἂν τοιαύτην κινήσιν κίνησιν ἢ ἀκο-  
 λουθήσῃ τὸ πρᾶγμα. τὸ γὰρ μεμνησθῆναι ἐστι τὸ ἐνεῖναι δύ-  
 ναμιν τὴν κινεῖν· τοῦτο δέ, ὥστ' ἐξ αὐτοῦ καὶ ὧν ἔχει κινή-  
 12 σεων κινήθηναί, ὥσπερ εἴρηται.

451b24. γίγνεται] γένεται α || 451b24–25. ὥς (l. 24)–ἐκείνη (l. 25)] *om.*  $\Gamma^1$  || 451b25. γενομένων] γιγνομένων  $\alpha H^a \gamma Z^a P$  || οἷων] ὁποῖων  $Mich^c$  || 451b26. τὰ πόρρω, πῶς μεμνήμεθα] πῶς τὰ πόρρω μεμνήμεθα  $Mich^c(27.29)$  || 451b27. ὥς] ὅτι α || ὁ] *om.*  $H^a N Z^a$  || ἐστι] *om.*  $\Gamma^2$  || τρόπος πως] τρόπος  $EIV$  || 451b27–28. ἴλέγει (l. 27)–ἀναμνησθεῖς† (l. 28)] *del.* *Freudenthal* || 451b27. λέγει] λέγω δὲ  $EIVC^c MiPT^1 \Gamma^2$  : λέγω  $bX^2$  : autem (quomodo) dicit  $\Gamma^2$  || τὸ ἐφεξῆς] consequenter est  $\Gamma^1$  || 451b28. προζητήσας] προοζητήσας  $E^1$  || τῷ] τῶν  $S$  || 451b29. ἀλλήλαις] *om.*  $quV^2 Nim \Gamma^2$  || ἥδε] hec quidem  $\Gamma^1$  || 451b29–30. ἀναμμνήσκεισθαι] ἀναμμνήσθαι  $SZ^a(sed—\kappa\epsilon\ s.l.)$  || 451b30. ποιήσει] ποιήσας  $E^1 C^c Mi$  : faciens  $\Gamma^1(ut v.)$  : uoluerit  $\Gamma^2$  || ζητήσει] ζητεῖ  $C^c Mi$  || 451b30–31. λαβεῖν ἀρχὴν κινήσεως] ἀρχὴν κινήσεως  $H^a$  : ἀρχὴν κινήσεως λαβεῖν  $Z^a P$  || 451b31. τάχιστα καὶ κάλλιστα] τάχιστα καὶ μάλιστα  $C^c iUT^1$  : κάλλιστα καὶ τάχιστα  $Mich^l(variant codd.)$  || 451b31–452a1. γίγνονται ἀπ' ἀρχῆς αἱ ἀναμνήσεις] αἱ ἀναμνήσεις γίγνονται ἀπ' ἀρχῆς  $P$  || 452a1. ἔχουσι] ἔχει  $quMP$  || 452a2. οὕτω καὶ αἱ κινήσεις] οὕτω καὶ αἱ κινήσεις πρὸς αὐτὰς τῷ ἐφεξῆς  $O^d S$  : *om.*  $C^c Mi \Gamma^1$  || 452a3. εὐμνημόνευτα] εὐμνημονευτότατα  $C^c Mi$  : ἀμνημόνευτα  $LZ^a$  || 452a4. φαύλως καὶ] φαύλως  $E^c(in ras.)$  : φαῦλα  $\alpha \Gamma^1$  : prave  $\Gamma^2$  || καὶ χαλεπῶς] *om.*  $\Gamma^1$  || τούτῳ] τούτου  $E$  : τούτο  $H^a N Z^a$  : in hoc  $\Gamma^1 \Gamma^2$  || 452a5–6. πως δι' αὐτοῦ] πως δι' αὐτοῦ  $EIVC^c MiXSNZ^a m$  || 452a6. τὸ] τοῦ  $X$  || ἀλλά] ἄλλα  $\mu(incertum O^d)$  || 452a7. μέμνηται] μέμνηται  $bVP$  : memoratur  $\Gamma^1 \Gamma^2$  || 452a8. ἀναμνησθῆναι] μνησθῆναι  $N$  || ζητεῖν] ζητῶν  $\alpha \Gamma^1 \Gamma^2, fort. recte$  || εὐρίσκει] εὐρίσκειν  $S^1$  || 452a9. ἕως ἂν] ἔαν  $EIVC^c MiS$  || 452a9–10. ἢ ἀκολουθήσῃ] ἢ ἀκολουθήσῃ  $C^c Mi$  : ἢ ἀκολουθῇ  $P$  : consequitur  $\Gamma^1$  || 452a10. μεμνησθῆναι] ἀναμμνήσκεισθαι *Freudenthal* *duce*  $Mich^p$  || ἐστι τὸ ἐνεῖναι] ἀρμ $NmPT^1 \Gamma^2$   $Mich^c$  : ἐστι τῷ ἐνεῖναι *Hayduck* || 452a10–11. δυνάμει] δυνάμει  $\alpha \Gamma^1 \Gamma^2$  || 452a11. δέ] autem est  $\Gamma^1 \Gamma^2$  || ὥστ'] ὥς  $Z^a$  : sicuti  $\Gamma^1$  : ut et  $\Gamma^2$

generally speaking, this particular movement occurs, when other movements of the sort that we have mentioned have occurred. Now, we need not inquire how we recall that which is far apart in a series, but only how we recall that which is closely connected in the series; for it is clear that in a way it is by the same method, †but one says the series without having previously sought or recollected.† For it is by habit that the movements follow one after another in a particular order.<sup>26</sup> And when, therefore, a man wishes to recollect, this is what he will do: He will seek to take a starting point of the movement, after which the object that he seeks will come to him. This is why recollections come fastest and best {452a} from a starting point; for just as the things are related to each other in the series, so also are the movements.<sup>27</sup> Those that have some sort of order are easily remembered, for instance, the mathematical objects, while the others are only badly remembered and it is difficult to do so.

And recollecting differs from relearning something by this that one can in a way be moved through himself to the point after the starting point. But when he cannot, and it has to happen through someone else, then he no longer recalls. But often one cannot recollect at the moment, but he can seek what he desires and then discovers it. This happens when he moves many items,<sup>28</sup> until he produces the sort of movement which is followed by the thing that he seeks. For to recall is the internal presence of a moving potential; and this, as has been stated, must be understood in the way that the person is moved by himself and by the movements he has.

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<sup>26</sup> “For it—a particular order”] The point being that this order is not necessarily the order in which they actually occurred, but the order established by habit.

<sup>27</sup> “movements”] That is, “inner movements” in the process of recollection.

<sup>28</sup> “moves many items”] Aristotle means to say that, when you attempt to recollect something, you start a lot of movements inside yourself in order to obtain the movement that you wish to recall.



12 δεῖ δὲ λαβέσθαι ἀρχῆς. διὸ  
 ἀπὸ τόπων δοκοῦσιν ἀναμνησκεισθαι ἐνίστε. τὸ δ' αἴτιον ὅτι  
 ταχὺ ἀπ' ἄλλου ἐπ' ἄλλο ἔρχονται, οἷον ἀπὸ γάλακτος  
 15 ἐπὶ λευκόν, ἀπὸ λευκοῦ δ' ἐπ' ἄερα, καὶ ἀπὸ τούτου ἐφ'  
 ὑγρόν, ἀφ' οὗ ἐμνήσθη μετοπώρου, ταύτην ἐπιζητῶν τὴν ὥραν.

ἔοικε δὴ καθόλου ἀρχὴ καὶ τὸ μέσον πάντων· εἰ γὰρ μὴ  
 πρότερον, ὅταν ἐπὶ τοῦτο ἔλθῃ, μνησθήσεται, ἢ οὐκέτ' οὐδὲ  
 ἄλλοθεν, οἷον εἴ τις νοήσειεν ἐφ' ὧν ΑΒΓΔΕΖΗΘ· εἰ  
 20 γὰρ μὴ ἐπὶ τοῦ Θ μέμνηται, ἐπὶ τοῦ Ζ ἐμνήσθη· ἐντεῦθεν  
 γὰρ ἐπ' ἄμφω κινήσῃ ἐνδέχεται, καὶ ἐπὶ τὸ Η καὶ ἐπὶ  
 τὸ Ε. εἰ δὲ μὴ τούτων τι ἐπιζητεῖ, ἐπὶ τὸ Γ ἐλθὼν μνησθή-  
 σεται, εἰ τὸ Δ ἢ τὸ Β ἐπιζητεῖ. εἰ δὲ μὴ, ἐπὶ γε τὸ Α· καὶ  
 οὕτως αἰεῖ. τοῦ δ' ἀπὸ τοῦ αὐτοῦ ἐνίστε μὲν μνησθῆναι, ἐνίστε δὲ  
 25 μὴ, αἴτιον ὅτι ἐπὶ πλείω ἐνδέχεται κινήσῃ ἀπὸ τῆς αὐ-  
 τῆς ἀρχῆς, οἷον ἀπὸ τοῦ Γ ἐπὶ τὸ Ζ ἢ τὸ Δ. ἐὰν οὖν  
 διὰ παλαιοῦ κινῆται, ἐπὶ τὸ συνηθέστερον κινεῖται· ὥσπερ γὰρ  
 φύσις ἥδη τὸ ἔθος. διὸ ἃ πολλάκις ἐννοοῦμεν, ταχὺ ἀνα-  
 μνησκόμεθα· ὥσπερ γὰρ φύσει τόδε μετὰ τόδε ἐστίν, οὕτω

452a12. λαβέσθαι ἀρχῆς] λαβέσθαι ἐξ ἀρχῆς *X* || 452a13. ἀπὸ τόπων] ἀπὸ τύπων  
 Mich<sup>l</sup>(29.4) : et a locis *Γ'* : ἀπ' ἀτόπων *Hamilton, fort. recte* || ἀναμνησκεισθαι] ἀναμ-  
 μνήσθαι *E'* || 452a14. ἀπ' ἄλλου ἐπ' ἄλλο] ἀπ' ἄλλου ἐπ' ἄλλον *qO'N* : ἀπ' ἄλλο *E* : ab  
 aliis in aliud *Γ'* || 452a15–16. ἐφ' ὑγρόν] ὑγρόν *qUN* || 452a16. ἀφ' οὗ] *an* ἐφ' οὗ *scriben-*  
*dum*? || ταύτην] ταύτη *E* || ἐπιζητῶν] δὲ ζητεῖ *C'Mi* : εἰ ζητῶν *S* || 452a17. δὴ] δ' ἢ *C'Mi* :  
 δὲ *Nm* : autem *Γ'Γ'* || καθόλου] τὸ καθόλου *βV<sup>2</sup>P Mich<sup>l</sup>* || ἀρχῇ] ἢ ἀρχῇ *EYb* : ἀρχῇ  
*H<sup>a</sup>XUO<sup>d</sup>m* || 452a18. ἢ] ἢ οὐδὲν ἢ *C'Mi* || οὐδὲ] οἶδεν *EIV<sup>1</sup>C'MiΓ'* : *om. X* || 452a19.  
 ἄλλοθεν] ἄλλοθι *P* || ἐφ' ὧν] ἐφ' ὧ *S* : in quibus est *Γ'* || ΑΒΓΔΕΖΗΘ] ΑΒΓΔΕΖΗΘ(*I*)  
*Ross* || 452a20. ἐπὶ τοῦ Θ μέμνηται] *Sorabji* : ἐπὶ τοῦ Ε μέμνηται *θLmPT<sup>2</sup> Mich<sup>p</sup>* : *om. α* :  
 ἐπὶ τοῦ ΕΘ μέμνηται *H<sup>a</sup>X* : reminiscitur *Γ'* : ἐπὶ τοῦ Ι μέμνηται *Ross* || ἐπὶ τοῦ Ζ] *Sorabji* :  
 ἐπὶ τὸ ΗΘ *EYb<sup>1</sup>V<sup>1</sup>i* : ἐπὶ τοῦ ΘΕ *H<sup>a</sup>Xb<sup>2</sup>* : ἐπὶ ΤΗΘ *C'M* : ἐπὶ τοῦ Θ *ιV<sup>2</sup>LUO<sup>d</sup>m Mich<sup>p</sup>* :  
 ἐπὶ τοῦ ΕΘ *S* : in *T Γ'Γ'* : ἐπὶ τοῦ Ε *Ross* || ἐμνήσθη] *αριUO<sup>d</sup>mP* : ἐμνήσθη *S* : μνησθή-  
 σεται *Ross* : meminit *Γ'Γ'* || 452a21. κινήσῃ] κινήθῃ *U* || τὸ Η] *Sorabji* : τὸ Δ *ββV<sup>2</sup>P*  
*Mich<sup>p</sup>* : τὸ Α *EIV<sup>1</sup>C'Mi* : Α *Γ'* : Δ *Γ'* || ἐπὶ] *om. P* || 452a22. τὸ Ε] τὸ Θ *X* : Ε *Γ'Γ'* :  
 τὸ Ζ *Zajaja* : Γ *Smyly* || ἐπιζητεῖ] ἐξήτει *EYC'MiU* || 452a23. εἰ] ἐπὶ *EIV<sup>1</sup>* : ἢ *C'MiΓ'* ||  
 τὸ Δ] *X* : τὸ Η *αθLH<sup>a</sup>mP Mich<sup>p</sup>* : Α *Ross* || τὸ Β] *X* : τὸ Ζ *μβ<sup>2</sup>V<sup>2</sup>C'MLH<sup>a</sup>vζ<sup>a</sup>mP Mich<sup>p</sup>* :  
 τὸ Θ *EY* || ἐπιζητεῖ] ἐπεζήτει *qb<sup>2</sup>m* : *om. C'Mi* || εἰ δὲ] *om. S* || ἐπὶ γε τὸ Α] ἐπὶ τὸ Α  
*αP* : ἐπὶ τὸ Η *Ross* || 452a24. τοῦ δ'] τὸ δ' α || 452a25. ὅτι ἐπὶ πλείω ἐνδέχεται] τὸ ἐπὶ  
 πλείον ἐνδέχεσθαι *EYbV* : ἐπὶ πλείω ἐστὶ *C'MΓ'* : τὸ ἐπὶ πλείον ἐνδέχεται *H<sup>a</sup>* : ὅτι πλείω  
 ἐνδέχεται *P Mich<sup>c</sup>*(30.26) : ὅτι ἐνδέχεται ἐπὶ πλείω *Mich<sup>l</sup>*(30.19) || 452a26. ἀπὸ τοῦ Γ] ab  
 ipso C quidem *Γ'* || τὸ Ζ] *I Γ'* : Ε *Γ'* || οὖν μὴ *ββ<sup>2</sup>V<sup>2</sup>PT<sup>2</sup> Mich<sup>c</sup>* || 452a27. διὰ  
 παλαιοῦ] δι' ἃ πάλαι οὐ *EIV<sup>1</sup>* : διὰ πολλοῦ *Ross* : διὰ (τὸ) παλαιοῦ *Beare* : διὰ παλαιοῦ  
*Förster* || κινήται] κινήθῃ α || ἐπὶ] ἐπεῖ *EIV<sup>1</sup>b<sup>1</sup>* || τὸ] *om. EIV<sup>1</sup>* || συνηθέστερον] ἀσυν-  
 ηθέστερον *Rolfes* || 452a28. ἃ πολλάκις ἐννοοῦμεν] *scripsi* : ἃ πολλάκις ἐννοοῦμεθα *ββ<sup>2</sup>P*  
*Mich<sup>p</sup>* : πολλάκις ἃ ἐννοοῦμεν *EVC'Mi* || 452a29. ἐστίν] ἢ δυνάμει *C'Mi* : est potentia *Γ'*

Now, a starting point must be taken. This is why people sometimes seem to recollect from “places”.<sup>29</sup> The reason is that they proceed quickly from one to the other, for instance, from milk to white, from white to air, and from this to moist, from which autumn is recalled, if this is the season that one is seeking.

Generally speaking, it seems that in all things the middle is the starting point; for if one does not recall before, he will recall when he comes to the middle, or else he will not recall from any other place,<sup>30</sup> as in an example where one thinks about a series represented by the letters ABCDEFGH: For if one does not recall at H, the sought item is recalled at F; for from here it is possible to be moved in both directions, both to G and to E. But if he seeks neither of these, he will recall after having gone to C, if it is D or B he seeks. And if not, then after having gone to A, and so on in all cases. And the reason why we sometimes recall, sometimes do not, even though starting from the same point, is that it is possible to be moved to several points from the same starting point; for example, one can be moved to both F and D from C.<sup>31</sup> If, then, one is moved on an old path, one is moved to what is more habitual; habit here takes the role of nature. This is the reason why we can quickly recollect things that we often think about; for just as a particular thing has a natural order after another particular thing, so

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<sup>29</sup> “places”] That is, apparently, a kind of *loci* (ἀπὸ τόπων). But the passage does not accord well with the usual conception of *loci*. I find Hamilton’s conjecture extremely tempting.

<sup>30</sup> “or else he will not recall from any other place”] That is, if one does not recall when at the middle point, one will not recollect the wished thing at all.

<sup>31</sup> “to both F and D from C”] From C, F is a (possible) habitual movement, while D is a natural movement.

30 καὶ συνηθεία· τὸ δὲ πολλάκις φύσιν ποιεῖ. ἐπεὶ δ' ὥσπερ  
 452b ἐν τοῖς φύσει γίνεταί καὶ παρὰ φύσιν καὶ ἀπὸ τύχης,  
 ἔτι μᾶλλον ἐν τοῖς δι' ἔθους, οἷς ἢ φύσις γε μὴ ὁμοίως ὑπάρχει,  
 ὥστε κινήθῃναι ἐνίοτε καὶ καὶ ἄλλως, ἄλλως τε  
 καὶ ὅταν ἀφέλκῃ (τι) ἐκεῖθεν αὐτόσε πη, διὰ τοῦτο καὶ ὅταν  
 5 δέη ὄνομα μνημονεῦσαι, παρόμοιον μὲν, εἰς δ' ἐκείνο σολοι-  
 6 κίζομεν.

6 τὸ μὲν οὖν ἀναμνήσκεσθαι τοῦτον συμβαίνει τὸν  
 τρόπον. τὸ δὲ μέγιστον, γνωρίζειν δεῖ τὸν χρόνον, ἢ μέτρον  
 ἢ ἀορίστως. ἔστω δέ τι  $\tilde{\phi}$  κρίνει τὸν πλείω καὶ ἐλάττω· εὐ-  
 λογον δ' ὥσπερ τὰ μεγέθη· νοεῖ γὰρ τὰ μεγάλα καὶ  
 10 πόρρω οὐ τῷ ἀποτείνειν ἐκεῖ τὴν διάνοιαν, ὥσπερ τὴν ὄψιν  
 φασὶ τινες (καὶ γὰρ μὴ ὄντων ὁμοίως νοήσει), ἀλλὰ τῇ  
 ἀνάλογον κινήσει· ἔστι γὰρ ἐν αὐτῇ τὰ ὅμοια σχήματα καὶ  
 κινήσεις. τίνι οὖν διοίσει, ὅταν τὰ μεῖζον νοῇ, ὅτι ἐκεῖνα νοεῖ,  
 ἢ τὰ ἐλάττω; πάντα γὰρ τὰ ἐντὸς ἐλάττω, καὶ ἀνά-  
 15 λογον [καὶ τὰ ἐκτός].

15 ἔστι δ' ἴσως ὥσπερ καὶ τοῖς εἰδεσιν  
 ἀνάλογον λαβεῖν ἄλλο ἐν αὐτῷ, οὕτω καὶ τοῖς ἀποστήμα-

452a30. συνηθεία] *Cook Wilson* : ἐνεργεία  $\alpha\beta P$  : ἔθει *Sophonias* || τὸ δὲ]  $\text{hoc } \Gamma^1 \Gamma^2$  || ὥσπερ] *om. EYVP* || 452b1. ἐν τοῖς φύσει γίνεταί] ἐν τῇ φύσει γίνεταί *EYVP* : γίνεταί ἐν τοῖς φύσει  $\rho Nm$  || 452b2. ἔτι μᾶλλον] *adhuc autem magis*  $\Gamma^1$  || τοῖς δι' ἔθους] τοῖσδε ἔθους  $C^c Mi$  || γε] *om.*  $\rho \omega^2 O^d SmP$  || μὴ] *om.*  $\alpha \Gamma^1$  :  $\mu$   $U$  || 452b2–3. ὁμοίως ὑπάρχει] ὑπάρχει ὁμοίως  $vZ^a P$  || 452b3. καὶ ἄλλως] *om.*  $\alpha \Gamma^1$  || 452b4. καὶ ὅταν] καὶ *EYVP* || ἀφέλκῃ (τι)] *Beare* : ἀφέλκεται *Christ* : ἀφέλκῃ  $\alpha\beta P$  || αὐτόσε πη] αὐτὸς *EYbVU*<sup>1</sup> (γράφεται) : αὐτὸς ἐπεὶ  $C^c Mi$  : αὐτὸ σέ πη  $S$  : αὐτόσε πη  $U^1 O^d P$  : *ipse*  $\Gamma^1$  : *ipse casu quoquam*  $\Gamma^2$  || διὰ τοῦτο] *om.*  $\Gamma^1$  : *et propter hoc*  $\Gamma^2$  || καὶ ὅταν<sub>2</sub>] γὰρ ἐπεὶ δ' ἂν  $E$  : γὰρ ἐπειδὴν *YVU*<sup>1</sup> (γράφεται) : *cum*  $\Gamma^2$  || 452b5. δέη ὄνομα] ἐπεὶ μόνον *EY* : δέη ὀνόματος *Mich<sup>p</sup>* : ἐπὶ ὄνομα *Christ* || 452b5–6. μνημονεῦσαι, παρόμοιον μὲν, εἰς δ' ἐκείνο σολοικίζομεν] *reminisci dissimile, sicut quidem illud soloecismum facimus*  $\Gamma^1$  || 452b5. μὲν, εἰς δ'] ὡς μὲν, εἰς  $\alpha$  : ἴσμεν εἰς  $P$  : *sicut quidem*  $\Gamma^1$  : *quo scimus in*  $\Gamma^2$  : εἰ ἴσμεν, εἰς *Förster* || 452b6. τοῦτον] τοῦτ{ο/ον}  $C^c$  || 452b7. γνωρίζειν] γνωρίζει μὲν  $C^c M$  || 452b8. ἀορίστως] ἀορίστοις  $L$  || ἔστω] ἔτι  $P$  : *sic*  $\Gamma^1$  || τι  $\tilde{\phi}$ ] ὅτῳ ποτὲ  $C^c M$  : τι  $S$  : *quod sic*  $\Gamma^1$  : ὁ *Mich*<sup>c</sup> (32.26) || κρίνει] κινεῖ *EYbV*<sup>1</sup> || ἐλάττω] ἐλάσσω  $\rho \omega Z^a m$  *Mich<sup>c</sup>* || 452b9. ὥσπερ] *est sicut et*  $\Gamma^1$  : *sicut et*  $\Gamma^2$  : ὥπερ *Beare* || νοεῖ] νοῇ  $S$  : νοεῖν  $O^d$  : *et intelligit*  $\Gamma^1$  || 452b11. ὁμοίως] ὁμως  $\rho$  || 452b11–12. ἀλλὰ τῇ ἀνάλογον] ἀλλὰ τινα λόγον  $\beta V^2$  || 452b12. αὐτῇ] αὐτοῖς  $\alpha \Gamma^1$  : αὐτῷ  $vZ^a P$  || 452b13. *Mich<sup>v</sup>* 34.15–16: ἢ ὅτι ἐκεῖ ἀνανοεῖν τὰ ἐλάσσω || κινήσεις] αἱ κινήσεις  $umP$  || οὖν] *enim*  $\Gamma^1 \Gamma^2$  || ὅταν] ἢ ὅταν  $C^c Mi \Gamma^1$  || τὰ] *om.*  $\theta H^a XP$  || νοῇ] νοῇ ἢ  $\beta V^2 P^2$  *Mich<sup>l</sup>* || ὅτι] ὅταν *Freudenthal* || ἐκεῖνα] ἐκεῖ *Mich<sup>v</sup>* || 452b13–14. νοεῖ, ἢ] νοεῖν  $\rho \omega V^2 Nim$  *Mich<sup>l/c</sup>* : καὶ ἀνανοεῖν  $U$  (γράφεται)  $m$  (γράφεται)  $v$  (γράφεται) : νοεῖ  $Z^a P$  : *intelligit*  $\Gamma^2$  || 452b14. ἐλάττω<sub>1</sub>] ἐλάσσω  $\rho iUmP$  *Mich<sup>l/c</sup>* || γὰρ] οὖν *Mich<sup>c</sup>* || ἐλάττω<sub>2</sub>] ἐλάσσω  $\rho U NimP$  *Mich<sup>c</sup>* || καὶ] ὥσπερ *EYbV* || 452b15. καὶ τὰ ἐκτός] *del. Ross* || δ'] δὴ  $\rho \omega$  : *enim*  $\Gamma^1$  || ὥσπερ καὶ] ὥσπερ *EYbV* || τοῖς] ἐν τοῖς  $C^c Mi v Z^a mP$  || 452b16. ἄλλο] ἄλλ'  $\rho iUO^d mPT^2$   $\Gamma^1$  || αὐτῷ] αὐτῷ  $\alpha iXSmP$  || τοῖς] ἐν τοῖς  $C^c Mi Z^a$

also by habit; and frequency makes it nature. And since {452b} it is the case that, just as in natural things there are still occurrences that are against nature and coincidental, so even more in the things that are by habit, to which nature does not belong in the same way, so that one is sometimes moved to there and sometimes elsewhere,<sup>32</sup> particularly when something draws the person from there to some other place—because of this also when we have to remember a name, we obtain some similar name and make a mistake as regards the former.

Recollecting, then, occurs in this way. But the most important point is that one must cognise time, either with an exact measure or indeterminately. Now, let it be granted that there is something, by which one judges the more and the less time; and it is reasonable that one does this like one does with magnitudes; for one thinks about big things not by the thought stretching out to the object, as some say that sight does (for the thought will think about the objects in the same way, even when they are not present),<sup>33</sup> but by a proportionate movement; for in thought there are similar figures and movements. How, then, when the thought thinks about larger objects, is it different when it thinks about these from when it thinks about smaller objects? For all the internal objects are smaller, and they are proportionate.<sup>34</sup>

Perhaps, just as we may assume that one has in himself something else proportionate to the forms, so also he has something propor-

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<sup>32</sup> “moved to there and sometimes elsewhere”] That is, “sometimes moved to the natural and required next in the series, but sometimes to another point in the series”.

<sup>33</sup> “are not present”] Or “do not exist”. Cf. Caston (1998) 260.

<sup>34</sup> “and they are proportionate”] This must mean “proportionate to each other”. Thus, the emendation of the passage.

σιν. ἴσπερ οὖν εἰ τὴν AB BE κινεῖται, ποιεῖ τὴν ΓΔ·  
 ἀνάλογον γὰρ ἡ ΑΓ καὶ ΓΔ. τί οὖν μάλλον τὴν ΓΔ ἢ  
 τὴν ΖΗ ποιεῖ; ἢ ὡς ἡ ΑΓ πρὸς τὴν AB ἔχει, οὕτως ἡ  
 20 Θ πρὸς τὴν Ι ἔχει. ταύτας οὖν ἅμα καὶ κινεῖται. ἂν δὲ τὴν  
 ΖΗ βούληται νοῆσαι, τὴν μὲν BE ὁμοίως νοεῖ, ἀντὶ δὲ τῶν  
 ΘΙ τὰς ΚΛ νοεῖ· αὗται γὰρ ἔχουσιν ὡς ΖΑ πρὸς ΒΑ.†

ὅταν οὖν ἅμα ἡ τε τοῦ πράγματος γίνηται κίνησις καὶ ἡ τοῦ  
 χρόνου, τότε τῇ μνήμῃ ἐνεργεῖ. — ἂν δ' οἴηται μὴ ποιῶν, οἶε-  
 25 ται μνημονεύειν· οὐδὲν γὰρ κωλύει διαψευσθῆναί τινα καὶ  
 δοκεῖν μνημονεύειν μὴ μνημονεύοντα· ἐνεργοῦντα δὲ τῇ μνήμῃ  
 μὴ οἶεσθαι ἀλλὰ λανθάνειν μεμνημένον οὐκ ἔστιν· τοῦτο γὰρ  
 ἦν αὐτὸ τὸ μεμνησθαι. — ἀλλ' ἐὰν ἡ τοῦ πράγματος γένηται  
 29 χωρὶς τῆς τοῦ χρόνου ἢ αὐτῇ ἐκείνης, οὐ μέμνηται.  
 29 ἡ δὲ τοῦ  
 30 χρόνου διττὴ ἔστιν· ὅτε μὲν γὰρ μέτρῳ οὐ μέμνηται αὐτόν,  
 453a οἷον ὅτι τρίτην ἡμέραν ὁδήποτε ἐποίησεν, ὅτε δὲ καὶ μέ-  
 τρῳ· ἀλλὰ μέμνηται καὶ ἐὰν μὴ μέτρῳ· εἰώθασιν δὲ λέ-  
 γειν ὅτι μέμνηται μὲν, (τὸ) πότε μέντοι οὐκ ἴσασιν, ὅταν  
 4 μὴ γνωρίζωσι τοῦτο [πότε] τὸ ποσὸν μέτρῳ.

452b17. ΓΔ] ΑΔ  $\mu E\gamma bVLH^aNm$  Mich<sup>1/c</sup> || 452b18. καὶ καὶ ἡ  $E\gamma bVN$  || 452b18–19. ἡ  
 τὴν] *om.* α || 452b19. ἡ] ἢ (δτι) *Beare* || πρὸς τὴν AB] πρὸς AB  $\rho\delta\upsilon\zeta^amP$  Mich<sup>1</sup> : πρὸς τὴν  
 AZ *Freudenthal* || 452b19–20. ἡ Θ]  $C^eMi$  : ἡ τὸ Θ  $\beta b^2V^2$ (γράφεται) $P$  Mich<sup>c</sup> : ἡ Θ  $E^1$  :  
 ἡ ΚΘ  $E^3YV^1$  || 452b20. τὴν Ι] τὸ Μ  $\beta V^2$ (γράφεται) $P$  Mich<sup>c</sup> : τὴν Μ *b, prob. Freudenthal et*  
*Bekker* || ἅμα καὶ] ἅμα αΓ<sup>2</sup> || 452b21. νοῆσαι] ποιῆσαι *Beare* || μὲν] *om.*  $EYV$  || BE] ΘΕ  
 $C^eMi$  : GB BE  $\Gamma^2$  || 452b21–22. τῶν ΘΙ] τῶν ΓΘΙ  $S$  : TC  $\Gamma^2$  || 452b22. τὰς ΚΛ] τὰς ΚΑ  
 $E\gamma bV^1$  : KLM  $\Gamma^2$  || ΖΑ πρὸς ΒΑ] ΖΑΖΒΑ  $C^eMi$  : ΖΑ et ΒΑ  $\Gamma^1$  || 452b23. οὖν] μὲν  $P$  ||  
 γίνηται κίνησις] κίνησις γίνεταί  $P$  || 452b24. ἐνεργεῖ] ἐνεργῇ  $C^eMi$  || οἴηται] εἴτε  $XN$  ||  
 452b24–25. οἶεται] *om.*  $\rho\delta\upsilon\zeta^am\Gamma^2$  Mich<sup>1/p</sup> : οἴηται  $XP$  || 452b25. οὐδὲν]  $\rho\delta E^1\gamma bUm$  : οὐθὲν  
 $E^4$ (*ex* οὐδὲν *corr.*) $C^eMiO^dS$  : οὐκ ἔστι μνήμη· οὐδὲν  $P$  || 452b26. ἐνεργοῦντα] *agente*  $\Gamma^1$  ||  
 452b27. μὴ] *om.* αζ<sup>a</sup> $\Gamma^1$  || ἀλλὰ] *om.*  $EYb$  : ἅμα  $C^eMi\Gamma^1$  || μεμνημένον] μεμνημονευμένον  
 $X$  || οὐκ ἔστιν] οὐκέτι  $X$  || 452b28. ἡ] ὁ  $S$  : ἡ  $NP$  || γένηται] γίνεταί  $\delta\upsilon\zeta^amP$  || 452b29.  
 τῆς] *om.*  $C^eMi\delta\upsilon\zeta^amP$  || ἡ αὐτῇ] ἡ αὐτῇ  $\mu E^1YV$  : ἡ αὐτῇ  $bC^eMi$  : ἡ αὐτῆς  $vmP$  : *aut ipse sine*  
 $\Gamma^2$  || 452b30. διττὴ] δισσή  $\rho\delta C^eMi\delta\upsilon\zeta^amP$  || αὐτόν] αὐτὸ  $EYbV$  : αὐτῶν  $\iota C^eMiLH^amP$  :  
 tempora  $\Gamma^1$  (!) || 453a1. οἷον—ἐποίησεν] *voces in 453a1–2 (post καὶ μέτρῳ) transponendas esse*  
*cens. Freudenthal* || οἷον] *om.*  $EYb^1V\zeta^aPT^1$  || τρίτην ἡμέραν] τρίτη ἡμέρα  $EYb^1V$  : τρίτης  
 ἡμέρας  $C^eMi$  : τρίτη ἡμέρα *Biehl* || ὁδήποτε ἐποίησεν]  $C^eMi$  : ὅτι μέντοι ποτὲ ἐποίησεν  
 $\rho\delta Nm$  : ὁδήποτε ποιῆσαι  $EYV^1$  : ὅτοι μέντοι ποτὲ ἐποίησεν  $P$  : *quod fecit aliquando*  $\Gamma^1$  ||  
 453a1–2. ὅτε δὲ καὶ μέτρῳ] et mensura  $\Gamma^1$  || 453a2. καὶ ἐὰν] *quān*  $C^eMi$  : *quamvis*  $\Gamma^1\Gamma^2$  ||  
 μὴ] μὴ καὶ  $EYb$  || εἰώθασιν] εἶθε *quoniam* || δέ] enim  $\Gamma^2$  || 453a3. μέμνηται] μέμνηται  $\rho\delta Um$   
 || (τὸ) πότε μέντοι] *scripsi* : πότε μέντοι α $UO^dP$  : πότε δὲ  $\rho$  : πότε δὲ μέντοι  $S$  || ὅταν] ὅτε  
 $P$  || 453a4. μὴ γνωρίζωσι τοῦτο [πότε] τὸ ποσὸν] *scripsi* : τοῦ πότε μὴ γνωρίζωσι τὸ ποσὸν  
 $C^eMi\Gamma^2$  : μὴ γνωρίζωσι τοῦτο πότε ποσὸν  $EYb^1V^1$  : μὴ γνωρίζωσι τοῦτο πότε τῷ ποσῷ  
 $\rho\delta b^2UO^dm$  : μὴ γνωρίζωσι τοῦτο τῷ ποσῷ  $S$  : μὴ γνωρίζωσι τοῦτο πότε τῷ ποσῷ  $P$

tionate to intervals. †For instance, if one is moved by AB BE,<sup>35</sup> he then produces CD; for the movements AC and CD are proportionate. Why then does he rather make CD than FG? Surely it is because just as AC is to AB, so H is to I. Thus, he is moved by these movements simultaneously. But if he wants to think about FG, he thinks about BE in the same way, but instead of HI he thinks about KL; for these are related as FA is to BA.†

Thus, when both the movement of the thing and the movement of the time occur simultaneously, then one actualises his memory.—And if one thinks that he does, without really doing so, he thinks that he remembers; for there is nothing to prevent that one is deceived and thinks he remembers, when he is really not remembering; but when one is actualising his memory it is not possible that he does not think he is, but is unaware that he is recalling; for this is what recalling essentially was.<sup>36</sup>—But if the movement of the thing occurs separately from the movement of time, or if the latter occurs separately from the former, then one does not recall.

Now, the movement of time is twofold. Thus, sometimes one does not recall with an exact measure, {453a} for instance, that one did so and so the day before yesterday, and, on the other hand, sometimes one does recall with an exact measure; but one still recalls, even if it is not by an exact measure; people usually say that they recall, but yet do not know the exact time of occurrence, when they do not cognise the quantity of time by an exact measure.

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<sup>35</sup> AB BE] Here and in the following Aristotle uses the article in the female gender in front of the letters. This shows that he is either thinking of the letters strictly as “movements” or, in the context of the diagram he is drawing, as “lines”. Movements are, I believe, the more probable reference.

<sup>36</sup> “for this is what recalling essentially was”] For the definition, cf. 452a10–12.

- 4 ὅτι μὲν οὖν οὐχ οἱ αὐ-  
 5 τοὶ μνημονικοὶ καὶ ἀναμνηστικοί, ἐν τοῖς πρότερον εἰρηται.  
 διαφέρει δὲ τὸ μνημονεῦν τοῦ ἀναμνησθεσθαι οὐ [μόνον]  
 κατὰ τὸν χρόνον, ἀλλ' ὅτι τοῦ μὲν μνημονεῦν καὶ τῶν ἄλ-  
 λων ζώων μετέχει πολλά, τοῦ δ' ἀναμνησθεσθαι οὐδὲν ὥς  
 εἰπεῖν τῶν γνωριζομένων ζώων, πλὴν ἀνθρώπος. αἴτιον δ' ὅτι  
 10 τὸ ἀναμνησθεσθαί ἐστιν οἷον συλλογισμός τις· ὅτι γὰρ  
 πρότερον εἶδεν ἢ ἤκουσεν ἢ τι τοιοῦτον ἔπαθε, συλλογίζεται ὁ  
 ἀναμνησκόμενος, καὶ ἔστιν οἷον ζήτησις τις. τοῦτο δ' οἷς καὶ  
 τὸ βουλευτικὸν ὑπάρχει, φύσει μόνοις συμβέβηκεν· καὶ γὰρ  
 14 τὸ βουλευέσθαι συλλογισμός τις ἐστιν.  
 14 ὅτι δὲ σωματικὸν τι  
 15 τὸ πάθος καὶ ἡ ἀνάμνησις ζήτησις ἐν τοιούτῳ φαντάσμα-  
 τος, σημεῖον τὸ παρενοχλεῖν ἐνίους, ἐπειδὴν μὴ δύνωνται  
 ἀναμνησθῆναι καὶ πάννυ ἐπέχοντες τὴν διάνοιαν, καὶ οὐκέτ'  
 ἐπιχειροῦντας ἀναμνησθεσθαι οὐδὲν ἤττον, καὶ μάλιστα  
 τοὺς μελαγχολικοὺς· τούτους γὰρ φαντάσματα κινεῖ μάλιστα.  
 20 αἴτιον δὲ τοῦ μὴ ἐπ' αὐτοῖς εἶναι τὸ ἀναμνησθεσθαι, ὅτι  
 καθάπερ τοῖς βάλλουσιν οὐκέτι ἐπ' αὐτοῖς τὸ στήσαι, οὕτω καὶ  
 ὁ ἀναμνησκόμενος καὶ θηρεύων σωματικὸν τι κινεῖ, ἐν ᾧ  
 τὸ πάθος. μάλιστα δ' ἐνοχλοῦνται οἷς ἂν ὑγρότης τύχη ὑπ-  
 ἀρχουσα περὶ τὸν αἰσθητικὸν τόπον· οὐ γὰρ ῥαδίως παύεται

453a4. μὲν οὖν] μὲν *S* || 453a5. ἐν τοῖς πρότερον] πρότερον *qO<sup>d</sup>SN* || 453a6–7. τὸ (l. 6)-  
 μνημονεῦν (l. 7)] *om. P* || 453a6. τὸ μνημονεῦν τοῦ ἀναμνησθεσθαι] τοῦ μνημονεῦν  
 τὸ ἀναμνησθεσθαι *avZ<sup>a</sup>Γ<sup>1</sup>* || μόνον] *delevi* || 453a9. γνωριζομένων] γνωριζόντων *rmNm* ||  
 453a10. τὸ] *om. vZ<sup>a</sup>P* || ὅτι γὰρ] *quod aliquid Γ<sup>1</sup>* || 453a11. πρότερον εἶδεν ἢ ἤκουσεν]  
 πρότερον ἤκουσεν ἢ εἶδεν *LH<sup>a</sup>N* : πρότερον ἢ ἤκουσεν ἢ εἶδεν *X* : εἶδε πρότερον ἢ  
 ἤκουσεν *P* : prius aut uidit aut audiuit *Γ<sup>2</sup>* || τι τοιοῦτον ἔπαθε] τοιοῦτον ἔπαθε *X* : τι  
 ἔπαθε τοιοῦτον *P* || 453a13. ὑπάρχει] *meminere accidit Γ<sup>1</sup>* || φύσει μόνοις συμβέβηκεν]  
 μόνοις συμβέβηκεν *qm* : μόνοις συμβέβηκεν φύσει *P* : *om. Γ<sup>1</sup>* || 453a14. δέ] δ' ἐστὶ  
*E<sup>1</sup>YbC<sup>c</sup>MivZ<sup>a</sup>P* || 453a14–15. τι τὸ πάθος] τὸ πάθος *αO<sup>d</sup>SZ<sup>a</sup>P* : τι πάθος *Xv* : passio *Γ<sup>1</sup>* :  
*quaedam passio Γ<sup>2</sup>* || 453a15. καὶ] *om. Γ<sup>2</sup>* || ζήτησις] *om. Γ<sup>1</sup>* || 453a15–16. φαντάσματος]  
 φαντάσματος *LZ<sup>a</sup>P* : φαντάσματος{ι/ος} *H<sup>a</sup>* || 453a16. σημεῖον] *signum est Γ<sup>1</sup>* || ἐνίους]  
 ἐνίους *U* || ἐπειδὴν] *quoniam autem Γ<sup>1</sup>* || 453a17. ἀναμνησθῆναι] ἀναμνησθῆναι *X*  
 || καὶ] καίτοι *Z<sup>a</sup>P* || πάννυ ἐπέχοντες] *N, con. etiam Christ* : πάννυ ἐπέχοντας *quib<sup>2</sup>C<sup>m</sup>P* :  
 ἐπέχοντες *E* : ἐπέχοντας πάννυ *vP* : deficientes *Γ<sup>1</sup>* : valde adhibentes *Γ<sup>2</sup>* || οὐκέτ'] *om.*  
*C<sup>c</sup>MiΓ<sup>1</sup>* || 453a19. φαντάσματα] τὰ φαντάσματα *UvZ<sup>a</sup>P* || μάλιστα] *om. P* || 453a20. τοῦ  
 μὴ ἐπ' αὐτοῖς εἶναι] *ipsius esse non a se ipsis Γ<sup>1</sup>* || ἐπ' αὐτοῖς] ἐφ' ἑαυτοῖς *E<sup>1</sup>C<sup>c</sup>MivZ<sup>a</sup>mP*  
 || τὸ ἀναμνησθεσθαι] *om. EYV<sup>1</sup>vZ<sup>a</sup>P, fort. recte* || ὅτι] *om. C<sup>c</sup>MiΓ<sup>1</sup>* || 453a21. οὐκέτι]  
 non amplius est *Γ<sup>1</sup>* || 453a22. θηρεύων] ὁ θηρεύων *vZ<sup>a</sup>mP* : *om. Γ<sup>1</sup>* || σωματικὸν τι]  
 σωματικὸν *EV* || ἐν ᾧ] *om. EYbV<sup>1</sup>* || 453a23. τὸ πάθος] πάθος *EYbVO<sup>d</sup>SP* : passio est  
*Γ<sup>1</sup>Γ<sup>2</sup>* || ἐνοχλοῦνται] ἐνυπάρχει *EYbV* : ἐνοχλεῖ *C<sup>c</sup>Mi* : *lectio incerta Γ<sup>1</sup>* || 453a23–24. τύχη  
 ὑπάρχουσα] *inest Γ<sup>1</sup>*

It has been stated already in the previous discussions that the people who are good at remembering are not the same as those who are good at recollecting. And remembering differs from recollecting not concerning time, but in the fact that a lot of other animals also partake in remembering, but so to speak none of the known animals partake in recollecting, except man. Now, the reason is that recollecting is like a sort of deduction; for the man who is recollecting deduces that he has previously seen or heard or experienced something of this sort, and this is like a sort of search. But this belongs naturally only to those who also possess the faculty of deliberation; for deliberating is also a sort of deduction.

Now, that the affection is something corporeal, and that recollection is a search for an image in something of a corporeal type, is proved by the fact that some people are bothered when they cannot recollect, even though they focus their thought extremely hard, and are still bothered even when they are no longer trying to recollect; this is the case especially with melancholics, since they are particularly moved by images. Now, the reason why they are not capable of recollecting is that, just as those who throw a stone are no longer capable of stopping it, so also the man who is recollecting and hunting an item moves something corporeal in which the affection is found. And the men that happen to have moisture around the area concerned with sensation are especially bothered; for when the moisture has been



- 25 κινήθεισα, ἕως ἂν ἐπέλθῃ τὸ ζητούμενον καὶ εὐθυπορήσῃ ἡ  
κίνησις. διὸ καὶ ὀργαὶ καὶ φόβοι, ὅταν τι κινήσωσιν, ἀντι-  
κινούντων πάλιν τούτων οὐ καθίστανται, ἀλλ' ἐπὶ τὸ αὐτὸ ἀντι-  
κινούσι. καὶ ἔοικε τὸ πάθος τοῖς ὀνόμασι καὶ μέλεσι καὶ  
λόγοις, ὅταν διὰ στόματός τι αὐτῶν γένηται σφόδρα· παυ-  
30 σαμένοις γὰρ καὶ οὐ βουλομένοις ἐπέρχεται πάλιν ἄδειν ἢ  
31 λέγειν.
- 31 εἰσὶ δὲ καὶ οἱ τὰ ἄνω μείζω ἔχοντες καὶ οἱ νανώ-  
453b δεις ἀμνημονέστεροι τῶν ἐναντίων διὰ τὸ πολὺ βάρος ἔχειν  
ἐπὶ τῷ αἰσθητικῷ, καὶ μήτ' ἐξ ἀρχῆς τὰς κινήσεις δύνα-  
σθαι ἐμμένειν ἀλλὰ διαλύεσθαι, μήτ' ἐν τῷ ἀναμνησκει-  
σθαι ῥαδίως εὐθυπορεῖν. οἱ δὲ πάμπαν νέοι καὶ (οἱ) λίαν γέρον-  
5 τες ἀμνήμονες διὰ τὴν κίνησιν (οἱ μὲν γὰρ ἐν φθίσει, οἱ δ'  
ἐν αὐξήσει πολλῇ)· ἔτι δὲ τὰ γε παιδία καὶ νανώδη  
ἐστὶ μέχρι πόρου τῆς ἡλικίας.

Περὶ μὲν οὖν μνήμης καὶ τοῦ μνημονεύειν, τίς ἡ φύσις  
αὐτῶν καὶ τίνι τῶν τῆς ψυχῆς μνημονεύει τὰ ζῶα, καὶ  
10 περὶ τοῦ ἀναμνησκεσθαι, τί ἐστὶ καὶ πῶς γίγνεται καὶ διὰ  
11 τίν' αἰτίαν, εἴρηται.

453a25. ἂν ἐπέλθῃ] ἂν ἐπανεέλθῃ *EIVVζ<sup>a</sup>mP* : ἂν ἐπανεέλθῃ ἐπὶ *C'M* : ueniat  $\Gamma^1$  : superveniat  $\Gamma^2$  || εὐθυπορήσῃ] εὐθυπορήσει *EP* || 453a26. διὸ δι' ὁ *Mich<sup>c</sup>* || ὅταν τι κινήσωσιν] ὅταν κινήθωσιν *V<sup>2</sup>O<sup>d</sup>S Mich<sup>l</sup>* : ὅταν τι κινήθωσιν *XUN* : ὅταν κινήσωσιν *P* || 453a27. πάλιν τούτων] τούτων πάλιν *X* || οὐ καθίστανται] οὐκ ἀνθίστανται *O<sup>d</sup>* || 453a27-28. τὸ αὐτὸ ἀντικινούσι] ταυτὰ ἀντικινούσι *LH<sup>a</sup>* : ταυτὰ τι κινούσι *XN* : τὸ αὐτὸ τι κινούσι *U<sup>l</sup>* : ταυτὰ τι κινούσι *O<sup>d</sup>S* || 453a28. τὸ πάθος] hec passio  $\Gamma^1\Gamma^2$  || καὶ μέλεσι] *om.*  $\Gamma^1$  || 453a29. τι αὐτῶν γένηται σφόδρα] γένηταί τι αὐτῶν σφόδρα *C'MI\Gamma^2* : γένηται τις φόρα *EIV* : τι γένηται αὐτῶν σφόδρα *U* || 453a30. ἐπέρχεται] accidere  $\Gamma^1$  || 453a31. μείζω ἔχοντες] ἔχοντες μείζω *X* || 453a31-b1. οἱ νανώδεις] οἱ ἀνανώδεις *S* : ναννώδεις *LX* : νανώδεις *H<sup>a</sup>m* οἱ οἰνώδεις *Mich<sup>p</sup>* || 453b4. εὐθυπορεῖν] εὐπορεῖν *C'Mi* : *om.*  $\Gamma^1$  || (οἱ) λίαν] *scripsi duce ζ<sup>a</sup>* : λίαν ἀμ $\nu$ *mP* || 453b5. ἀμνήμονες] inmemores sunt  $\Gamma^1\Gamma^2$  || 453b6. ἐν αὐξήσει] ἐν αὐξῇ *Xm* || πολλῇ] πολλῇ εἰσὶν *avP\Gamma^1\Gamma^2* || δέ] *om.* *EIVVζ<sup>a</sup>P* || γε] *om.* *Mich<sup>c</sup>* || νανώδη] ναννώδη *LX* : νανώδ{η/εις} *P* || 453b7. ἐστὶ] εἰσὶ *qmP* : sunt  $\Gamma^1\Gamma^2$  || μέχρι πόρου τῆς ἡλικίας] μέχρι πολλῶ τῆς ἡλικίας *X* : sunt usque longam etatem  $\Gamma^1$  || 453b8. μὲν οὖν] quidem  $\Gamma^1$  || τίς] καὶ τίς *P* : que sit  $\Gamma^1\Gamma^2$  || 453b9. τίνι] τί *EIVV<sup>l</sup>* || 453b11. τίν' αἰτίαν] τίνας αἰτίας *avζ<sup>a</sup>P\Gamma^1*.

moved, it is not easily stopped, until what is sought arrives and the movement takes a straight course.<sup>37</sup> This is also the reason why angers and fears, when they have moved something corporeal, do not stop even when the subjects set up countermovements, but set up their own countermovement in the same direction. The affection also resembles the names, tunes, and arguments, whenever one of them has been very much on our lips; for even when we have stopped and do not want to continue, the song or the argument comes back once again.

Now also those who have larger upper parts, that is, {453b} dwarfish people, have weaker memories than people for whom it is the other way around, because the former have a heavy load on their faculty of sense, and because their movements are from the beginning not capable of staying but become dispersed, and because they cannot easily follow a straight course in recollecting. The very young and the very old, on the other hand, have weak memories because of the movement (the latter being in decay, the former in much growth); furthermore, little children are, until they have progressed in age, also dwarfish.

This, then, is our description of memory and remembering, what their nature is and by which part of the soul animals remember; and of recollecting, what it is, how it occurs, and the reason for it.

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<sup>37</sup> “takes a straight course”] Either Aristotle still has some physiological speculations in mind, or, perhaps more likely (see 453b3–4), “straight course” refers to a regular series of images that will eventually produce the desired result.



### CHAPTER THREE

## ESSAY 1: ARISTOTLE ON MEMORY AND RECOLLECTION

*I have learned with some degree of wonder, in the course of the present Conference [Aristotle and Contemporary Science International Conference, 1997], that Aristotle knew everything worth knowing. By a happy coincidence, this knowledge coheres perfectly with what we now believe we know about everything worth knowing, including matter, mind, space and time, social science, and even quantum mechanics and DNA. The present contribution, I fear, will strike a dissonant note, ...*

Ronald de Sousa (2000)

### *Introduction*

Philosophy of mind is one of the most hotly debated areas in contemporary philosophy, and Aristotle's contributions to the subject, particularly the views set forth in the *De anima* and occasionally supplemented by minor works such as the essays of the *Parva naturalia* or the *De motu animalium*, are still considered by thinkers of our age;<sup>1</sup> whether or not Aristotle can, properly speaking, be said to have a philosophy of mind, his thoughts and solutions have often been applied more or less directly to contemporary problems. The Aristotelian ideas that are most often used or discussed are four: (1) The hylomorphism of the soul-body relationship, (2) his theory of perception, (3) his theory of imagination (φαντασία), and (4) his theory of mind (νοῦς). The first has sometimes been seen as a viable alternative to the solutions of the mind-body relationship proposed by post-Cartesian philosophers, while the latter three have been discussed primarily with the intention of establishing more precisely Aristotle's own views on the subjects of perception and sensation, mental objects and, more generally, mind or soul. This latter dis-

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<sup>1</sup> Cf. e.g. Putnam (1975a) xiv; Putnam (1975b) 302. See also, more broadly on contemporary usage of Aristotle, the papers in Sfendoni-Mentzou (2000) and Buchheim & Flashar & King (2003).

cussion is, however, also relevant as regards the use of the Aristotelian hylomorphism. On the one hand, it has been argued forcefully, based on an interpretation of Aristotle's theory of perception, that his theory of the soul and the body cannot be used in present-day philosophy of mind, while other scholars and philosophers regard Aristotle as a proto-functionalist and accept his views on a par with the views of our contemporaries.

Agreement on these issues is hardly forthcoming in the near future. The road to any agreement here is a full understanding of Aristotle's writings in this area, and such understanding has eluded philosophers, scholars and theologians for millennia. The *De anima* is notoriously difficult, and Aristotle's views on perception and thinking are far from clear. Thus, in the last decades several very different interpretations of Aristotle's theory of perception have been proposed, ranging from the view that he thought that the sense-organs literally take on the qualities of the sensed object,<sup>2</sup> to the view that he did not even think that the matter of the sense-organs was moved or altered in any way.<sup>3</sup>

In the present essay I will attempt another approach. Thus, the examination will take as its point of departure the relatively overlooked capabilities of "memory" and "recollection". These have been treated interestingly by several scholars, but, as will become clear, I do not accept the interpretations that have so far been proposed.<sup>4</sup> The aims of the following investigation are two: first, to determine what exactly were Aristotle's views on memory and recollection. And second, what consequences will follow for our conception of his theory as applicable to contemporary concerns? I believe that the *De memoria* is particularly well suited for this kind of investigation: the topic of this text has been relatively neglected by Aristotelian scholars, at least compared to such topics as mind and perception, and when it is treated, the modern views on memory have usually figured too prominently in the discussion. Furthermore, the topic is clearly relevant also to discussions of perception and other "mental" faculties or states. Aristotle explicitly states that memory depends for its existence on perception,<sup>5</sup> and thus

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<sup>2</sup> Slakey (1961); Sorabji (1974/79). However, Slakey holds that Aristotle's theory is purely materialistic, while Sorabji claims that there is a mental aspect in the process. See also Everson (1997).

<sup>3</sup> Burnyeat (1992). See also Broadie (1993); Johansen (1998).

<sup>4</sup> For treatments of Aristotelian theories of memory and recollection, cf. Lang (1980); Annas (1992a); Coleman (1992) 15–38; Sorabji (2004<sup>2</sup>); King (2004).

<sup>5</sup> *Sens.* 436a6–10; 436b1–8. See also *Mem.* 450a25–32.

it may even be hoped that a clarification of the Aristotelian theory of memory would shed new light on the theory of perception. However, this essay attempts only the examination of memory and recollection.

*Some Remarks on Memory*

If sense perception is important in order to be able to *be* in the world, memory is important to be able to be *someone* in the world. That is, a man who cannot remember anything at all (including by the word “memory” all the various kinds of memory types discriminated by modern philosophers and psychologists) would face the world completely unprepared at each individual instance: trees, houses, his wife, his children, in short, his life would be entirely renewed at every single point in time. People around him might, of course, say that he was a kind and generous man, basing themselves on their previous experiences with him and on the fact of bodily identity, but he would have no conception of himself as being kind and generous or as having bodily identity; he would have no conception of himself at all.

The problems involved when discussing memory are much more complicated than can be discerned from these few lines (and I shall return to the issue at the end of this essay), but it cannot, I think, be disputed that memory is a necessary constituent in concepts of the “self” and “personal identity”.<sup>6</sup> Even those scholars and philosophers who do not acknowledge that autobiographical memory constitutes the self simply by combining past events with present consciousness<sup>7</sup> still need a minimal mechanism linking sensations and thoughts, if such a thing as a self is to exist. Aristotle did not, apparently, have a very clear conception of “self” or “personal identity”, but he did recognise the importance of memory as regards the capacities and lives of individual human beings and animals. Most importantly, as regards human beings, memory is mentioned among the basic, conceptual tools in the formation of universal concepts,<sup>8</sup> but, as will be seen below, this is not the only function.<sup>9</sup>

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<sup>6</sup> Note, however, that I am not claiming that “self” and “personal identity” can be explained solely in terms of “memory”. Such discussion goes far beyond the limits of this essay. For philosophical discussions, cf. e.g. Williams (1973) and Warnock (1987).

<sup>7</sup> Cf. e.g. Schechtman (1994); Engel (1999) 80–108.

<sup>8</sup> *APo.* II.19; *Metaph.* I.1.

<sup>9</sup> For historical descriptions of memory, cf. Yates (1966); Herrmann & Chaffin (1988); Carruthers (1990); Coleman (1992).

*The Aristotelian Treatise De Memoria*

Approaching the *Corpus Aristotelicum*, it is a reasonable question what can be expected of the theory of memory set forth in the *De memoria*. Therefore, I must look briefly into the preconditions of this theory.

First, and very importantly, the position in the corpus must be noted. The treatise is part of the *Parva naturalia*, a series of essays in natural philosophy concerned with the capacities common to both body and soul of living beings.<sup>10</sup> Thus, at least theoretically, the essays of the *Parva naturalia* are thematically separated from the *De anima* because the latter examines only the soul and its capacities. Even though this distinction cannot be rigidly upheld, since the *De anima* frequently considers the role of the body in the soul-processes,<sup>11</sup> it is still true that by treating memory in the *Parva naturalia* Aristotle gives attention to the fact that the material side of memory is an important or even necessary ingredient in any sufficient theory.

This has both a positive and a negative side for the modern interpreter. It is positive because Aristotle excels in the analysis of individual subjects and is likely to come up with interesting observations and distinctions concerning memory. It is negative because modern science has left the material side of Aristotelian philosophy antiquated. We must be aware of the possibility that Aristotle's analysis may depend on his views concerning the physical structure of things, and the more they do so, the less value they will have for philosophers and scientists of the 21st century.

Another point to be aware of is that Aristotle's methodology must be expected to be somewhat different from that of 21st century philosophers and scientists. In the 4th century B.C. philosophy dominated almost every branch of research, which is, of course, not the case in the 21st century. Thus, as regards memory, it is the subject of both philosophy and psychology, but whereas philosophers will (most often) regard memory as a unitary phenomenon to be explained and pay particular attention to epistemological consequences, psychology will divide memory into different types and classify them according to their differences and abilities. Aristotle does not belong comfortably in either of these groups. He is generally close to the psychological approach, wishing to make clear distinctions when examining the different subjects, but it

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<sup>10</sup> *An.* 433b19–21; *Sens.* 436a5–17.

<sup>11</sup> For just one clear example, cf. the description of sound and hearing in *An.* II.8.

seems to me<sup>12</sup> that Aristotle in the *De memoria* is very interested in the conceptual problems related to memory. I hope to demonstrate this in the following examination of the text, and I shall return to the issue in the conclusion.

A third and final point concerns Aristotle's views on the soul as presented in the *De anima*. Since this text is in large parts obscure, it cannot unconditionally and as a whole be assumed as a foundation of further theories. However, I have assumed without argument one single but essential doctrine, *viz.* the definition of the soul as the form of a living body.<sup>13</sup> I do not accept the developmental view applied to Aristotle's theory of the soul by Nuyens and Ross.<sup>14</sup> The extant texts do not at all substantiate a radical change in Aristotle's views on the soul, which is, in addition, an uncommon process: we normally shift our position only at minor points. Furthermore, the developmental view has trouble dealing with the fact that the *Parva naturalia*, not to mention the biological treatises, are best regarded as the filling-in of the theory proposed in the *De anima*. If Aristotle had completely different views on the soul at the time when he wrote the *Parva naturalia* and at the time when he wrote the *De anima*, then there is no filling-in. Or, to put it more strongly: the texts cannot then be used together to establish any single coherent view. This I do not accept, and I assume throughout this essay, without further argument, that Aristotle's general definition of soul stands.

So, it can be seen that even though it is not the primary intention of this essay, it will be a contribution to the hotly debated issue of the relevance of Aristotle's philosophy of mind (soul), initiated, in particular, by Myles Burnyeat and continued since by several scholars and philosophers.<sup>15</sup> The conclusion drawn by Burnyeat<sup>16</sup> deserves to be quoted in order to make it clear what is at stake: "Hence all we can do with

<sup>12</sup> *Contra* Annas (1992a) 297 and King (2004) 30.

<sup>13</sup> *An.* II.1–3. See also *Metaph.* 1035b14–25.

<sup>14</sup> Nuyens (1948); Ross (1955) 3–18. However, Nuyens groups the *De sensu* and the *De memoria* with the *De anima*, while Ross argues that they are both earlier than the *De anima*. For criticism, albeit with arguments in favour of another developmental theory, cf. Block (1961).

<sup>15</sup> Cf. e.g. Burnyeat (1992); Sorabji (1992); Broadie (1993); Burnyeat (1995); Everson (1997); Johansen (1998); Putnam (2000); Sorabji (2001); Burnyeat (2002); Caston (2005). In general, the essays in Nussbaum & Rorty (1992) constitute a good introduction to the discussion.

<sup>16</sup> Burnyeat (1992) 26.



the Aristotelian philosophy of mind and its theory of perception as the receiving of sensible forms without matter is what the seventeenth century did: junk it.”

### *Aristotle on Memory*

#### *Preliminary Demarcation*

Memory is in the present but *of the past* (τὸ γενόμενον). Aristotle claims<sup>17</sup> that one can have hopes and expectations for the future, that one can sense the present, and that one can remember the past.<sup>18</sup> But this leads directly into a conceptual problem: How is it possible to relate to the past, since the past is gone and the remembering takes place in the present as do other internal processes such as sense perception and thinking? Aristotle does not immediately address the problem, but approaches it by further distinguishing memory from these two processes:

1. Remembering does not involve the process that originally led to the sensation or to the knowledge provided, or, to put it in Aristotle’s terms: when recalling something, the result of sensation and thinking is obtained without the objects and processes still being there to be grasped.<sup>19</sup>
2. Remembering, contrary to sensation and thinking, involves time, that is, when one remembers something sensed or thought, one is also (somehow) aware that it belongs to the past.<sup>20</sup>

This, then, is the preliminary demarcation of memory and its objects, but we still need a real definition, and, in particular, we need to know more about these objects, which must be the crucial, and often controversial, part of any such theory. When we perceive an object—say a white ball—it will be clear, at least to direct realists, which most

<sup>17</sup> *Mem.* 449b10–15; 449b26–28. Cf. also *EN.* 1168a13–14; *Rh.* 1389a21–24; 1390a8–9.

<sup>18</sup> For a denial of this initial fact, cf. Malcolm (1977) 13–15, who is not, however, interested in the details of Aristotle’s treatment. Sorabji (2004<sup>2</sup>) 13–14 basically agrees with Malcolm.

<sup>19</sup> *Mem.* 449b18–22.

<sup>20</sup> *Mem.* 449b24–25. For a more minute examination of these two passages, cf. the section “The Non-Existence of Memory Acts in Aristotle” (subsection “Memory Words in the *De Memoria* 1”) below.

of us are as regards perception, that the object of our perception is a round and white object with solid mass and with external existence.<sup>21</sup> But when we remember the white ball, it is not *this* (that is, the formerly perceived) external object that is our direct object, since it is not present any more; if it were, we would be perceiving it, not remembering it. Therefore, we must try to determine what exactly Aristotle considers this object to be, that is, we must clarify its functions and characteristics.

Furthermore, we will want to know *how* these objects are produced in us. In perception the sense impression is produced by the external object: how, then, is the impression that arises in us from remembering (whatever its exact nature) produced, since there is no obvious causal factor? What is it that we *do* to produce these objects? Or is the doing not part of memory at all? This is a causal problem of memory, well known also in modern psychology.<sup>22</sup> However, Aristotle holds some peculiar views on memory which make the problem at least partly different, although his ideas might actually be considered an attempted solution.

The last question, that is, the problem of memory acts, will be the main topic for investigation in this essay, since it reveals much about Aristotle's theory, and some surprising conclusions follow. In fact, a general and, I believe, hitherto overlooked conclusion concerns Aristotle's overall view of memory. As regards the ontological status of the objects of memory, the discussion must be somewhat more speculative; this is the discussion of images ("Images" below).

### *The Location of Memory*

Still, before proceeding to the main problem, memory can be further elucidated. It is not sufficient to state that memory is neither sense perception nor thinking. Memory has obvious links with perception, which supplies it with its material, and it would also seem to be connected with thinking. Further clarification of these relationships is needed.

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<sup>21</sup> Representationalism too will agree that there exists an external object which is the original cause of our perceiving. Only Phenomenalism will cause serious difficulties. A discussion of the different modern theories of perception goes beyond the limits of this essay. For the relevant literature, cf. e.g. Armstrong (1961); Robinson (1994); Foster (2000); Smith (2002); Schwartz (2004).

<sup>22</sup> Cf. the often-quoted article by Martin & Deutscher (1966).

Aristotle summarises his preliminary demarcation of memory as follows: “Memory, then, is neither sensation nor conception, but a state of having one of these or an affection resulting from one of these, when some time elapses.”<sup>23</sup> The latter comment, *viz.* that some time must pass before we have memory, is stressed once more a few lines later, and perhaps with equal force towards the end of the treatise.<sup>24</sup> Aristotle draws two conclusions from this: memory belongs only to animals that also sense time, and, more importantly, these animals remember by the same organ or faculty by which they sense.<sup>25</sup> It is not surprising that memory and a sense of time must be connected, since the original demarcation stated that memory is of the past, but it is not equally obvious that they must both belong to the same organ or faculty in us.

Aristotle has not, at this point in the *De memoria*, revealed what organ or faculty he is talking about, but his audience will either have known or will have been able to guess. Aristotle believes that the objects of perception are three in kind:<sup>26</sup>

1. Proper sensibles, that is, objects that can only be sensed by one particular sense (e.g. colour by sight, sound by hearing, etc.).
2. Common sensibles, that is, objects that can be sensed by more than one of the senses (e.g. magnitude, figure, movement and size).
3. Accidental sensibles, that is, objects that are sensed as the (accidental) result of sensing proper and common sensibles (e.g. a white ball, the son of Diaretes, etc.).

Time can only belong to the common sensibles, or less categorically, be grouped with the common sensibles, even though neither the *De anima* nor the *De sensu* make mention of it in their lists of common sensibles.<sup>27</sup> If one wants to talk about “sensing time” at all (that is, with

<sup>23</sup> *Mem.* 449b24–25: ἔστι μὲν οὖν ἡ μνήμη οὔτε αἰσθησις οὔτε ὑπόληψις, ἀλλὰ τούτων τινὸς ἕξις ἢ πάθος, ὅταν γένηται χρόνος.

<sup>24</sup> *Mem.* 449b28; 452b7 ff. In the latter passage it is, however, most likely that Aristotle is referring only to recollection.

<sup>25</sup> *Mem.* 449b28–30: ὥσθ’ ὅσα χρόνου αἰσθάνεται, ταῦτα μόνα τῶν ζώων μνημονεύει, καὶ τούτῳ ᾧ αἰσθάνεται.

<sup>26</sup> *An.* II.6; III.1.

<sup>27</sup> *An.* 418a16–20; 425a14–24; *Sens.* 437a8–9. The omission could, perhaps, be explained by the fact that Aristotle has in these two texts focused on perception of objects where time is not relevant; or perhaps because time is not sensed “in itself” but through movement, and *An.* II.6 explicitly states that common sensibles are sensed “in themselves”. However, based on the latter fact, Kahn (1974/79) 8n23, has argued that time is *not* a common sensible but still perceived by a common faculty of sense, which may very well be true. See also Labarrière (2000) 274n9.

the use of the proper senses), it must be something that occurs in all five senses, and it seems difficult to imagine what factors of accidental sensation that would produce the collected sensation of time, except as connected to the common sensibles. The audience will then have known that sensing time happens in the “common sense”, and at the same time that memory does so too.

*Thought, Imagination and Memory*

Thus, Aristotle has made some important philosophical choices. Most remarkably, he has made a complete separation of memory from thinking. Thought is not involved in remembering! As a matter of fact, Aristotle did not have much choice on this issue. Among mortal animals, he says, only human beings possess reason or thought,<sup>28</sup> but he is equally certain that some animals do possess memory.<sup>29</sup>

However, Aristotle still needs to address the problem that thinking and memory appear, at least in some cases, to be clearly connected. In particular, it is troubling since there can be no denying the fact that we sometimes remember objects of thought.<sup>30</sup>

Aristotle is therefore forced to introduce an argument showing the relationship between thinking, memory and sense of time.<sup>31</sup> But surprisingly, the passage does not initially make use of memory; instead imagination (φαντασία) is introduced. The sudden appearance of imagination in the discussion is most likely due to the fact that, as several philosophers have thought throughout history, memory and imagination are, if not identical, then at least very similar in their function,<sup>32</sup> and therefore Aristotle can base his arguments on the foundation laid

<sup>28</sup> *An.* 414b16–19; *Mem.* 453a9–14.

<sup>29</sup> *Mem.* 450a15–19; *Mem.* 453a6–9; *HA.* 488b24–26.

<sup>30</sup> See also the argument in *An.* 408b24–29 that μνημονεύειν, among other πάθη, does not belong to thinking, even though it does decay when the mind decays. Cf. also the obscure passage *An.* 430a22–25, which apparently makes a similar point.

<sup>31</sup> *Mem.* 449b30–450a25. Sorabji (2004<sup>2</sup>) 71–72, sees this passage primarily as introducing the second topic of *Mem.* 1, viz. the bodily location of memory; he does not stress that it is also a discussion of the conceptual difficulties. See further King (2004) 32, 89–95.

<sup>32</sup> Cf. e.g. Hume (1739–1740/2000) 59–61; Ryle (1949) 245–279; Warnock (1987) 12; Casey (2000<sup>2</sup>) ix–xi. For criticism of such treatment of Aristotelian φαντασία, cf. Wedin (1988) 23–24. There is even some evidence that memory and imagination are neurologically related, cf. Engel (1999) 135–136.

down in the *De anima*;<sup>33</sup> in particular, it was stated in the *De anima* that imagination differs from all the other capacities (but memory is not mentioned in *An.* III.3), and that strictly speaking it is the function by which images (φαντάσματα) occur in us.<sup>34</sup>

The argument of the *De memoria* begins by stating that thinking needs images; we cannot think without images,<sup>35</sup> and therefore thinking depends on the capacity of imagination. This is a complicated subject, but the interesting thing for now is the second point mentioned above, *viz.* that imagination is the faculty by which images occur in us after they have been produced by prior sensations and stored in us. The process can, however, be understood in two ways:

1. In imagination images of things that we have formerly perceived are retrieved and combined in ways that do not accord with any of our original perceptions. In this sense, φαντασία corresponds well with our “imagination”.
2. In imagination images that correspond precisely to our prior perceptions are retrieved. In this sense, φαντασία corresponds well with our “memory”.

The second definition is the interesting one for our purpose. Whether or not the retrieving process is also part of memory will be discussed further below in the section “The Non-Existence of Memory Acts in Aristotle”. Nevertheless, imagination and memory are practically identical except for the often stressed fact that memory involves a sense of time. This, I stipulate, is the important difference: Whereas imagination (in the Aristotelian sense) will be a capacity that can be used primarily as an instrument for thinking, memory will serve to constitute the life of an individual in general, providing it with coherence.

Contrary to this, W.D. Ross has claimed that the important difference is not the time perception, but rather that memory comprises some things that are not comprised by imagination, for instance, causal relations of past events and mathematical theorems.<sup>36</sup> However, Ross seems to overstate this difference. Aristotle is very explicit that, when one remembers something, “even memory of the objects of thought”, it

<sup>33</sup> *An.* III.3; III.7–10.

<sup>34</sup> *An.* 428a1–4. On φαντάσματα, see the subsection “Images” below.

<sup>35</sup> *Mem.* 449b31–450a1. Cf. also *An.* 403a7–10; 431a16–17.

<sup>36</sup> Ross (1961) 39.

occurs by the use of an image (φάντασμα).<sup>37</sup> And Aristotle's summary of the entire passage on imagination and memory supports this view:<sup>38</sup>

καὶ (1) ἔστι μνημονευτὰ καθ' αὐτὰ μὲν ὧν ἔστι φαντασία, (2) κατὰ συμβεβη-  
κὸς δ' ὅσα μὴ ἄνευ φαντασίας

and (1) those things that are essentially memorable are also those of which there is imagination, (2) while those that are accidentally memorable are those that do not occur without imagination.

The first point concerns images qua images, while the second point concerns the objects of thought. Thus, the second point is where Ross sees the essential difference, but this difference is not as great as Ross' wording suggests.<sup>39</sup> The essential object of both imagination and memory is stated to be the same (*viz.* an image); it is only accidentally that they differ. This might easily be expanded, using Aristotelian terminology, into saying that they are identical but have different states of being.<sup>40</sup> Thus, Ross is probably right that imagination cannot take these objects, but memory only does so as an accidental phenomenon caused by the primary characteristic: sense of time.

The reason why Ross wants to stress the fact that we also remember objects of thought according to Aristotle is clear: An Aristotelian theory of memory that did not allow this would seem to be seriously compromised. Still, we do remember objects of thought, just not essentially, so the problem may not be insurmountable. I shall return to this issue below.

Having stated that imagination and memory are essentially identical, and that they are both found in the common sense, that is, in the heart, it is easy for Aristotle to claim that memory is connected with sensation, not thinking. The images used in thinking were shown already in the *De anima*<sup>41</sup> to be different from thoughts, but still the means for thinking. Similarly, in the *De memoria* it is stressed that an image is an

<sup>37</sup> *Mem.* 450a12–13.

<sup>38</sup> *Mem.* 450a23–25. See also 451a28–29.

<sup>39</sup> Ross (1961) 39: "But Aristotle does not limit the objects of memory to things that can be objects of φαντασία: he considers that we can remember not only what can be imagined, but also what is bound up with that which can be imagined; by which he must mean such objects of contemplation as a causal relation between two events in the past, or a mathematical theorem."

<sup>40</sup> Cf. the similar relationship of τὸ αἰσθητικόν and τὸ φανταστικόν (*Insomn.* 459a14–22). See also Labarrière (2000) 283.

<sup>41</sup> *An.* III.7–8.

affection of the common sense.<sup>42</sup> Thinking can also be applied to the images involved in memory, but thinking is not part of the definition of memory. Only two elements are involved in memory: the common sense and the image obtained through sensation, an image that can also be the object of imagination.

### *Images*

The crucial element, then, is the image (φάντασμα), and it must be asked if images can be described more precisely. Scholars have been much concerned with the ontology of these images, and therefore a digression on this topic is in order.<sup>43</sup>

Aristotle uses the word φάντασμα relatively rarely. A search through his writings, excluding the fragments and the pseudo-Aristotelian *De Mundo*, yields 47 occurrences, of which only three are found outside the psychological works.<sup>44</sup> These occurrences prove beyond doubt that by φάντασμα Aristotle refers to an internal image found in a person or an animal and dependent on φαντασία.<sup>45</sup>

First, there is the question of components or constitutive elements. In our post-Cartesian age, this could be defined as a question of whether the images are constituted by physical or non-physical (mental, in modern terminology) components, or by both. Using this terminology is, at least partly, unsatisfactory, since it can never truly be Aristotle's,<sup>46</sup> but, if we propose to ask this kind of question at all,<sup>47</sup> it would seem artificial not to use the terms "physical" and "non-physical". It must, however, be borne in mind throughout the discussion that there is no clear-cut distinction in Aristotelian terminology.

<sup>42</sup> *Mem.* 450a9–14.

<sup>43</sup> For some of the relevant literature on Aristotle's conception of images, cf. Nussbaum (1978) 221–269; Wedin (1988); Frede (1992); Schofield (1992); Caston (1996); Sisko (1996); Caston (1998); Rapp (2001); King (2004) 35–36, 40–45; Sorabji (2004<sup>2</sup>); Caston (2005). On mental representation and the "imagery debate", as the modern discussion of mental images has been dubbed, cf. e.g. Block (1981a); Block (1981b); Cummins (1989); Perner (1991); Tye (1991); Stich & Warfield (1994); Sigel (1999). For a brief introduction to the issues, cf. Pitt (2004).

<sup>44</sup> *Metaph.* 990b11–15; 1079a7–11; *EN.* 1102b2–11.

<sup>45</sup> For the dependence on φαντασία, cf. in particular *An.* 428a1–4.

<sup>46</sup> Even though Aristotle on occasion sounds strikingly dualistic, cf. e.g. *Top.* 106b1–4; *An.* 412b4–9.

<sup>47</sup> Cf. Sorabji (1974/79); Burnyeat (1992).

I will argue that there is both a physical and a non-physical component in images, even though this leaves Aristotle with a theory that some commentators have found crude and implausible, if not downright impossible.<sup>48</sup>

The physical aspect is, I think, easily demonstrated. I generally disregard the discussion concerning the related topic of perception, since the fact that a physical basis is needed for both perception and the resulting images does not in itself prove anything about the specific *process* of perception.<sup>49</sup> I do, however, make one important point below as regards the so-called literalist interpretation. Images are the causal results of perception,<sup>50</sup> the sense impression being somehow imprinted in the perceiver. Furthermore, several passages of the *De memoria* show that being capable of receiving and keeping an image depends on the physical constitution of the person or animal,<sup>51</sup> and it must also be noted that the issue treated in every essay of the *Parva naturalia* is, to some extent, the phenomena common to *body* and *soul*.<sup>52</sup> These all depend on sensation (αἰσθησις), and sensation occurs in the soul *through the body*.<sup>53</sup> In fact, the evidence in favour of a physical theory of images is so clear that one might speculate that they are simply physical entities to be viewed by the person or animal, or just physical processes and nothing more.

However, this does not seem to be the case. Even if the statements about the images being “in the soul”,<sup>54</sup> and the interesting distinction made between αἰσθήματα and φαντάσματα,<sup>55</sup> can be shown not to imply non-physicality, the fact that images and thoughts (νοήματα) are often

<sup>48</sup> Sorabji (1974/79) 47–48; Nussbaum (1978) 222–230; Caston (1998) 279–280.

<sup>49</sup> So also Broadie (1993) 140: “Aristotle [...] thinks of perception as the effect of one physical thing upon another. This, however, does not logically commit him to holding that the effect which is perception requires a distinct physical change (or set of such changes) in the physical substance affected.”

<sup>50</sup> Cf. *An.* 428b11–17; *Mem.* 450a10–12; 450a25–32; *Insomn.* 461a14–23; *Div. Somn.* 464a17–20.

<sup>51</sup> *Mem.* 450a32–b11; 453a14–31.

<sup>52</sup> *An.* 433b19–21; *Sens.* 436a5–17.

<sup>53</sup> *Sens.* 436b1–8; *Mem.* 450a27–29; *Somn.* 454a7–11.

<sup>54</sup> *An.* 431a14–17; 431b2–10; *Mem.* 450b7–11.

<sup>55</sup> *An.* 432a9–10: τὰ γὰρ φαντάσματα ὥσπερ αἰσθητά ἐστι, πλὴν ἀνευ ὕλης. On a quick reading, this might even be construed to preclude physicality, but Aristotle’s point is, I think, that αἰσθήματα refer to external physical objects, while φαντάσματα *qua* φαντάσματα do not. If anything could be said to be completely without matter, it would have to be νοήματα. On the passage, see also Nussbaum (1978) 257n52 and Caston (1998) 259n22.



confused is, I think, decisive. Thus, in an important passage of the *De anima* Aristotle tries hard to distinguish images and thoughts, and in the course of the discussion he even suggests the possibility that they might be identical (although he also dismisses that view).<sup>56</sup> So, images are, I believe, entities with a physical foundation that possess some level of non-physicality. It is tempting to formulate this Aristotelian view in terms of a supervenience theory and claim that what is represented by the φάντασμα is supervenient on the physical imprint in the person or animal,<sup>57</sup> but it is doubtful whether Aristotle ever considered anything like supervenience theories.<sup>58</sup> Still, I am convinced that the representation cannot, in modern terminology, be described solely in physical terms, that is, Aristotle does not mean that we really just perceive a physical *internal* object. If this was so, there seems to be no reason why this is not sensation proper, and I also find the statements about placing the internal images before one's eyes<sup>59</sup> and the statement about combining images<sup>60</sup> to be revealing; for these descriptions can hardly be meant literally. And finally, Aristotle says in the *De insomniis* that the movements caused by sense impressions (that is, the images) can be present in the human or animal without being perceived.<sup>61</sup> Therefore, some further kind of awareness seems to be needed in addition to the physical process. On the other hand, it seems then to follow that the form that is stamped into the sense organ does not literally make the organ take on its characteristics (colour, sound, smell, shape etc.); for if this was what happened, there would hardly be any need for the non-physical repre-

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<sup>56</sup> *An.* 432a3–14. See also *Mem.* 450b18–451a8, where φάντασμα and νόημα are apparently almost synonymous.

<sup>57</sup> This idea gains support from the description in *Mem.* 453a14–31. See in particular *Mem.* 453a14–16: ὅτι δὲ σωματικόν τι τὸ πάθος καὶ ἡ ἀνάμνησις ζητήσις ἐν τοιούτῳ φαντάσματι, ... = “Now, that the affection is something corporeal, and that recollection is a search for an image in something of a corporeal type, ...” It may be noted that Burnyeat (2002) 81–83 is willing to grant that something like this is also *logically* possible in the perceptual process, even according to his interpretation, but he is not sympathetic to such attempts. For support of a physical process in perception, see Cohen (1992); Everson (1997) 78–89 *et passim*.

<sup>58</sup> Cf. Granger (1993). But see also Everson (1997) 258–282. In some passages Aristotle does come close to talking in ways reminiscent of a kind of supervenience theory, cf. notably *Phys.* 246a4–9; *An.* 403a19–25; *Metaph.* 1036b1–7.

<sup>59</sup> Cf. *An.* 427b18–20; *Mem.* 450a4–7; *Insomn.* 458b20–25; *Po.* 1455a22–26.

<sup>60</sup> Cf. in particular *An.* 434a5–10. Aristotle's favourite example of this process is the “goat-stag” (τράγελαιφος), cf. *Int.* 16a16–17; *APo.* 92b5–8; *Phys.* 208a30–31.

<sup>61</sup> *Insomn.* 460b28–461a8.

sensation. Again, I think this is clearly indicated by Aristotle's remarks about searching *for* images in "something corporeal" by "moving" the latter.<sup>62</sup>

Thus, to sum up, an unspecified physical process, involving both the object and the sense organ, introduces the form into the latter, and after the disappearance of the original object the content of the form might remain in the primary organ of sense as a φάντασμα. This φάντασμα is physically based in the primary organ of sense, and its content (that is, the original form) can be brought forward and attended to by the possessor.

It is not, however, the question of physicality or non-physicality that has been at the centre of attention in modern scholarship, but rather whether or not images are pictorial. This is a complicated problem which involves in particular the *De anima*, the *Parva naturalia* and the *De motu animalium*, and I do not want to go into an extensive discussion of this topic, since I believe that at least in the *De memoria* Aristotle is very clear as regards pictorial images, and I find nothing in the text to suggest that Aristotle contemplated non-pictorial representations. That is, in the *De memoria* images (somehow) do involve pictorial representation.<sup>63</sup> However, since some scholars have claimed that the *De memoria* does not present clear evidence in favour of pictorial images, I shall briefly review this part of their arguments.<sup>64</sup>

In particular, I find it difficult to construe the descriptions in 449b30–450a7 (about φαντάσματα used in thinking) and in 450b18–451a10 (using a painted picture as a parallel) as non-pictorial in content.<sup>65</sup>

I think that scholars who favour non-pictorial images ("appearances") have been rather cavalier in their discussions of these passages.

<sup>62</sup> *Mem.* 453a14–31. Slakey (1961) 481–482 agrees that a number of passages in the *Parva naturalia* (*Sens.* 436b6–8; *Mem.* 450a27–29; *Somm.* 454a7–11) do not accord well with a literal interpretation of the perceptual process, but he claims that the differences must be explained with reference to developments in Aristotle's thought. For the elaborate argument he refers to Nuyens (1948) and Ross (1955).

<sup>63</sup> In this I follow Sorabji. Sorabji (2004<sup>2</sup>) xi–xx is an excellent discussion of the different views on images. This has always been the more popular view among Aristotelians, cf. e.g. Albertus Magnus, *Liber de memoria*, ed. Jammy (1651), 54a: "Sentiunt [*scil.* bruta] enim praeteritum per picturam praeteritorum quae sunt in ipsis." = "For [animals] sense the past through a picture of the past things that are found in them."

<sup>64</sup> Nussbaum (1978) 221–269; Caston (1998) 279–284; King (2004) 40–45.

<sup>65</sup> Furthermore, the description in 452b7–15 of a small-scale model in the soul, representing something in the outside world, also seems solid evidence in favour of pictorial images. For criticism, cf. Caston (1998) 262–263.

Thus, Nussbaum agrees that 449b30–450a7 seems committed to pictorial images used in thought, but she goes on to say that “he [*scil.* Aristotle] does not present the example as an exhaustive analysis”;<sup>66</sup> in fact, she says, his deliberations in the *De anima* about how to distinguish φαντάσματα and πρῶτα νοήματα show that at least some φαντάσματα must be non-pictorial;<sup>67</sup> for otherwise, no confusion with the πρῶτα νοήματα could arise. First, it must be noticed that Nussbaum does agree that Aristotle refers to pictorial images in this passage. Furthermore, against her explanation, it may be argued that there is nothing in the *De memoria* to suggest that the analysis is *not* exhaustive, and since φαντάσματα are always involved when one is thinking (even regarding the πρῶτα νοήματα), it is, I think, only natural that Aristotle would try to distinguish these two elements at the most basic level of thought. Caston argues, in another vein, that when a person is thinking he ignores certain features of the φαντάσματα, not in the sense that he disregards them, but rather in the sense that only *some* of the causal powers found in the (non-pictorial) φάντασμα are exercised.<sup>68</sup> This is ingenious, but it goes against the language of the entire passage: in particular, Aristotle describes the process as being parallel with drawing (γράφειν), and he describes the internal act as “placing X before one’s eyes” (τιθέναι πρὸ ὀμμάτων). There may even be a more serious problem with Caston’s view. For it seems to me that his analysis does not answer completely to the Aristotelian text, which reads as follows:<sup>69</sup>

συμβαίνει γὰρ τὸ αὐτὸ πάθος ἐν τῷ νοεῖν ὅπερ καὶ ἐν τῷ διαγράφειν· ἐκεῖ τε γὰρ οὐδὲν προσχρῶμενοι τῷ τὸ ποσὸν ὥρισμένον εἶναι τοῦ τριγώνου, ὅμως γράφομεν ὥρισμένον κατὰ τὸ ποσόν· καὶ ὁ νοῶν ὡσαύτως, κἂν μὴ ποσὸν νοῇ, τίθεται πρὸ ὀμμάτων ποσόν, νοεῖ δ’ οὐχ ἢ ποσόν.

for the same affection that occurs in drawing a diagram also occurs in thinking: for when drawing a diagram we make no use of the fact that the quantity of the triangle drawn is determinate, but still we draw it as having a determinate quantity; and similarly a person who thinks, even if he does not think about a quantity, he posits a quantity before his eyes, but does not think about it as a quantity.

If the drawing-example is a true parallel, one has to produce the *entire* φάντασμα, before one can abstract certain features. That is, even the

<sup>66</sup> Nussbaum (1978) 266–267.

<sup>67</sup> *An.* 432a12–14.

<sup>68</sup> Caston (1998) 284–287.

<sup>69</sup> *Mem.* 450a1–5.

unnecessary features, such as determinate quantity, is produced only to be ignored. But Caston's interpretation does not allow for this to occur, since some features of the φάντασμα will not be activated at all, according to him.

In 450b18–451a10 Aristotle is using a painted picture<sup>70</sup> to illustrate the difference between remembering and imagining. Again, scholars generally recognise that this illustration seems to correspond to Aristotle's analysis of memory and imagination, but Nussbaum argues that the *De memoria* 1 may well be making extensive use of picture-seeing in a purely metaphorical and illustrative sense.<sup>71</sup> Furthermore, both Nussbaum and Caston point out that the final definition of memory stresses the fact that the φάντασμα is had *as* a likeness or representation (εἰκόν), which, according to them, suggests that a φάντασμα is not always a likeness. But if a φάντασμα is pictorial, it is *eo ipso* a likeness, according to their interpretation.<sup>72</sup> However, I do not believe that these arguments are valid. Certainly, the use of real pictures to illustrate remembering and imagining is to some extent metaphorical, but such illustrations make much better sense, if images are pictorial. In fact, it seems likely that the reason why we often take Aristotle's analyses of memory and imagination to correspond precisely to the painted picture is rather that even today we easily relate to and understand the Aristotelian descriptions. As regards the second argument, it is true that on the view that images are pictorial in remembering and in imagining, in a sense they also do have representational content in both; but the whole point of Aristotle's argument is that one ignores the representational capacity of the φάντασμα when one is imagining.<sup>73</sup> Here the content of the internal state is a picture *in itself* (καθ' αὐτό) and nothing more. Nussbaum says that "[t]o say the *phantasma* is had *as* a likeness (451a15) is to suggest that *phantasmata* are not always likenesses".<sup>74</sup> I think it would be more correct to say that φαντάσματα are not always *had* (that is, *viewed*) as likenesses (= representations, in my translation). In this way it is indicated that

<sup>70</sup> Painted picture = ζῶον. For this meaning of the term, see also *Cat.* 1a1–6.

<sup>71</sup> Nussbaum (1978) 250.

<sup>72</sup> Nussbaum (1978) 249–250; Caston (1998) 282n80.

<sup>73</sup> Lang (1980) 391 expresses this nicely: "A mental image can be regarded either in itself (*kath' hautō*) or as a likeness (*eikon*) of something else. When considered in itself, an image is 'only [a]n object of contemplation or imagination.' That is, we consider the image in isolation from its extramental original and not as mnemonic token of an absent object."

<sup>74</sup> Nussbaum (1978) 250 (her emphasis).

the soul plays a very important role in the representational process; the φάντασμα is ontologically the same whether or not it is used in memory, imagination or thought.

To sum up, it seems that at present most scholars support the view that Aristotle did not, or at least not always, regard φαντάσματα as pictorial. But I think that the *De memoria* may well be the text which refutes this view.

### *Past and Present in Memory*

This, then, is what constitutes an image: it is pictorial and contains both physical and non-physical components, but we are still left with the more important conceptual problem:<sup>75</sup> if what we remember is an image made to arise at the time when we say that we are remembering, that is, in the present, there seems to be no reason why we should be said to remember the past. The object is in the present, so it would seem to be more correct simply to say that we are aware of an image in the present. We must search for the connection between the past object that was originally sensed and the present state of the image in us.<sup>76</sup>

There is, as has been described above, a physical connection between the past sensation and the present image. The sensation has done something physically to us in order to enable us to remember, but this is not the primary element of remembering, because the same physical event is also the basis of imagining. Rather, the primary element is the *modus spectandi*, that is, the way that we view the image. Pursuing such lines of thought Aristotle presents his solution.<sup>77</sup>

There are two ways of viewing the image:

1. As something in itself (αὐτό τι καθ' αὐτό).
2. As an image depicting something else (εἰκὼν ἄλλου).<sup>78</sup>

<sup>75</sup> *Mem.* 450a25ff.

<sup>76</sup> *Mem.* 450a25–27: ἀπορήσειε δ' ἂν τις πῶς ποτὲ τοῦ μὲν πάθους παρόντος τοῦ δὲ πράγματος ἀπόντος μνημονεύει τὸ μὴ παρόν.

<sup>77</sup> *Mem.* 450b11–451a2. See also King (2004) 31–32. For interesting parallels in other Aristotelian works, cf. *An.* 427b21–24; *PA.* 645a10–15; *Metaph.* 1024b21–24; *Po.* 1448b9–19.

<sup>78</sup> Caston (1998) 281, 282n80 claims that ἄλλου is a genitive of source and must be translated “from something else”, since both ways of viewing the image make it representational. But, as I have argued above, this is exactly what is to be ignored in the second way of viewing it.

Aristotle illustrates the differences with an example. A figure in a picture can be viewed both as the figure in itself (= no. 1) and as a representation of whatever the figure looks like (= no. 2). This is exactly parallel to what happens in us when we view the internal images that are brought to our attention. If the image is considered as something in itself, it can be categorised as a concept or thought (νόημα) or simply as an image.<sup>79</sup> However, if we view the image as a representation of something else that took place in the past, then the image is categorised as a memory impression (μνημόνευμα)<sup>80</sup> or simply as a representation (εἰκόν).

Even though the use of “thought” or “concept” (νόημα) in the description of the first way of viewing an image may well be considered confusing, thinking is not involved in any of the processes. Whereas *we* might say that memory simply supplies the material, which is then examined by another and more intelligent faculty, Aristotle does not. Memory is just the combined state of being aware of an image in oneself and viewing it as something else that has taken place in the past. This is clearly brought out by the final definition of memory.<sup>81</sup>

On this interpretation the theory of memory is, I believe, understandable, although somewhat different from modern theories; and furthermore, at least one fundamental difficulty still remains: what happens in the actualisation of memory and is it part of Aristotle’s conception of memory? I will treat this issue after having presented the second chapter of the *De memoria*: Aristotle’s theory of recollection.

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<sup>79</sup> φάντασμα is the proper term. The use of νόημα as an alternative shows that the difference was not very clear.

<sup>80</sup> This awkward translation makes μνημόνευμα correspond to αἴσθημα (“sense impression”). Sorabji translates “reminder”, but a reminder may represent something different from the remembered object, and a μνημόνευμα cannot. Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 115b, paraphrases *principium memorandi*.

<sup>81</sup> *Mem.* 451a14–16: τί μὲν οὖν ἐστὶ μνήμη καὶ τὸ μνημονεύειν, εἰρηται, ὅτι φαντάσματος, ὡς εἰκόνης οὗ φάντασμα, ἔστις, ... Troels Engberg-Pedersen points out to me that an Aristotelian theory defining memory as actual and present awareness of the image may go well with a likely interpretation of ἐμπειρία as analysed in the *Analytica posteriora* II.19. For more on this, cf. Engberg-Pedersen (1979) 314–318.

*Aristotle on Recollection**Demarcation: Memory, Recollection and Relearning*

Recollection is similar to memory in that it brings forth something in us that we have experienced or learned before. On the other hand, Aristotle has right from the beginning of the treatise stated that they are not identical. In the introductory part of the text it is explicitly said that people who are good at remembering (= the rather dull-witted) are often the opposite of those that are good at recollecting (= the quick-witted),<sup>82</sup> and in chapter 2 Aristotle proceeds to elaborate on the differences and to define recollection.

He begins the *De memoria* 2 with some preliminary, yet difficult, distinctions between memory and recollection.<sup>83</sup> One of the basic differences elaborated here is that memory does not arise immediately after our having perceived, learned or experienced something, while recollection on the other hand is an instantaneous process, comparable, in this respect, to perception. Recollection, Aristotle says,<sup>84</sup> is not recovery of the possessing state (ἔξις) of memory, but the recovery of the objects which do in time form such states, e.g. sensations, knowledge (accidentally) and generally whatever constitutes these states. This fact is, I believe, crucial to the understanding of the Aristotelian theories that are put forward in the *De memoria*.

Unlike the passive state of memory, recollection is a kind of active search, or, even more revealing, a kind of deduction.<sup>85</sup> It is not, therefore, to be categorised on a par with memory; that is, it cannot be spatially placed in any organ but is an intellectual capacity and a process that takes place in human beings.

The deductive part is found in the process. In nature movements are successive, following one upon the other in a natural order. When

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<sup>82</sup> *Mem.* 449b6–8. At least two reasons can be suggested for this, apparently, strange division. (1) Remembering is a state, recollection an act, and slow-witted people are in less motion than quick-witted, which is an advantage as regards states but not when it comes to acts. This, I suppose, is also Aristotle's point in calling (*HA.* 608b11–15) women better at remembering than men. (2) Memory belongs to the sensing soul, recollection to the thinking soul. The latter explanation is also found in Lang (1980). See also the vivid description/argument in Krell (1990) 13–14.

<sup>83</sup> *Mem.* 451a20–b10. For interpretations, cf. Wiesner (1998); Sorabji (2004<sup>2</sup>) 88–93; King (2004) 110–116.

<sup>84</sup> *Mem.* 451b2–5.

<sup>85</sup> *Mem.* 453a12, 15: ζητήσις τις; 453a10, 14: συλλογισμός τις.

trying to recollect, one will search for a point in a series from which one can be brought to the thing that one wants to recollect. The natural order of the movements, that is, the order in which they originally occurred, is one of the possible ways of recollecting, if one of the movements in the series is remembered. A series established by oneself due, for instance, to frequent repetition is called habit, and it equals nature in the recollection process.<sup>86</sup> Furthermore, one must pay attention to a starting point in time, and the kind of recollective means that are useful: similarity, contrarity, or close connection.<sup>87</sup>

These are the means by which one consciously and by decision recollects something. Therefore, the crucial part on which the success of the entire process hinges is whether or not one chooses the right starting-point (*ἀρχή*). Without a proper starting point, which turns out to be the middle point (*τὸ μέσον*) of a series,<sup>88</sup> providing the recollector with the possibility to proceed in different directions in his search for an item of the past, recollection will not succeed.

As was similarly the case with memory, time is also crucially important in the process of recollection, although in a different respect. Time is important not so much conceptually to define recollection but rather because recollection works on series of events, and these series are constituted by time and movement. Events follow chronologically on each other, and the best starting point is therefore, at least partly, dependent on time. For instance, if I wanted to recollect an event from my childhood, the best starting point would probably not be an event of yesterday, unless I had other reasons than time (e.g. if something happened yesterday that could be construed as similar or contrary to my childhood event).

It turns out, therefore, that although chapter 2 of the *De memoria* contains notoriously difficult passages,<sup>89</sup> the general philosophical ideas of the treatise are found primarily in chapter 1. I shall expand briefly on the differences between memory and recollection, as viewed by Aristotle, to substantiate this verdict.

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<sup>86</sup> *Mem.* 452a27–30.

<sup>87</sup> *Mem.* 451b18–20.

<sup>88</sup> *Mem.* 452a17.

<sup>89</sup> Cf., in particular, *Mem.* 452a17–26; 452b15–22.



*Memory and Recollection: The Differences*<sup>90</sup>*Conceptual Issues*

The conceptual difficulties examined by Aristotle are primarily related to memory, not to recollection. Even in modern philosophy and psychology, it is still not clear how we can be said, truly, to remember the past, which is one of the main topics of *De memoria* 1.<sup>91</sup> This does not mean that recollection is not concerned with the past; Aristotle merely prefers to treat this conceptual issue as one related particularly to memory. Some philosophers<sup>92</sup> deny that awareness of the past is really a criterium of memory, but most philosophers and psychologists, not to mention anybody that has not been philosophically trained, will consider awareness that X belongs to the past at least part of the definition.<sup>93</sup>

What is stated about recollection, on the other hand, does not relate to conceptual problems but rather to practical problems. True, recollection is defined in relation to memory and relearning, but this is not a difficult issue for Aristotle, and the point is only obscured by Aristotle's difficult language in this part of the text:<sup>94</sup> the passage must simply be regarded as an introductory demarcation. The interesting question about recollection is not *what* it is, but *how* we do it. Therefore, chapter 2 of the *De memoria* reads more like a treatise on mnemonic theory than an analysis of recollection.<sup>95</sup>

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<sup>90</sup> The argument of this section owes much to criticism made by Eyjólfur Kjalar Emilsson.

<sup>91</sup> *Mem.* 450a25–451a8.

<sup>92</sup> Notably Malcolm (1977).

<sup>93</sup> Cf. e.g. Tulving & Craik (2000) v (preface): "Memory is usually thought of as the ability to recollect past events and to bring learned facts and ideas back to mind. Memory and learning have these functions indeed, but an adequate definition must necessarily bring in further aspects." Note, however, that the part about bringing facts back to mind does not necessarily fit Aristotle's theory.

<sup>94</sup> *Mem.* 451a20–b10.

<sup>95</sup> On mnemonic theory in Aristotle, cf. Sorabji (2004<sup>2</sup>) 22–34. For more general, yet still historical descriptions, cf. Yates (1966) and Carruthers (1990). Also, Luria (1969) on a famous mnemonist is fascinating reading.

*Sense and Intellect*

There are great differences between memory and recollection as described by Aristotle. The most fundamental is that they belong to different faculties of the tripartite soul described in the *De anima* II–III: memory belongs to the sensing soul, recollection to the thinking soul. In a manner of speaking, therefore, memory is more closely related to perception than to recollection, just as recollection is actually a particular way of thinking and not anything like memory.<sup>96</sup> This is further brought out by the statement also found elsewhere that several animals can remember (all it takes is perceptual ability, which all animals possess, the ability to perceive time, which most animals have, and physically suitable sense-organs), but only man among the known animals can recollect.<sup>97</sup>

*Passive State and Active Process*

Finally, as regards the differences between memory and recollection, a corollary of attributing them to different soul-parts must be noticed: Memory is explicitly said to be the having of an image when one is in a particular condition or state, demanding nothing more of the person or animal remembering.<sup>98</sup> There is no real process to be identified in remembering, or rather: remembering *is* being in a certain state.<sup>99</sup> This will be further substantiated in the section “The Non-Existence of Memory Acts in Aristotle” below.

Recollection, on the other hand, is nothing but a process (of thought). We recollect by searching through images towards a goal, and when, or if, we reach this goal, we are no longer recollecting. If we retain the object (image) reached, it may become the state of memory, if not, we will lose it and will have to recollect it again or relearn it, if it is later needed. For instance, I may ask myself in the morning: “What

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<sup>96</sup> *Mem.* 453a4–14.

<sup>97</sup> *Mem.* 453a6–9; *HA.* 488b24–26.

<sup>98</sup> *Mem.* 451a14–16.

<sup>99</sup> Even though ἐξίς can, on occasion, indicate some sort of activity (see e.g. *Metaph.* V.20), the usual contrary is ἐνέργεια, cf. e.g. *Top.* 125b15–19; *EN.* 1098b33–1099a3 (for more passages, cf. Bonitz (1870) 251a, s.v. ἐνέργεια). In the present passage the passivity is stressed by the use of πάθος as an alternative (see further the section “The Non-Existence of Memory Acts in Aristotle” (subsection “Aristotle’s Definition of Memory”) below).

date is it today?”, and recollect from different factors that it is the 1st of October. However, if the information was not really important to me, or if I was distracted by something else immediately after having recollected, it is very likely that the information was not retained, and therefore, if in the evening I am asked the same question, it will take another process of recollection to establish the date. But if the information *was* retained in the morning, I will be able to answer the question immediately when asked in the evening, since there is a state or disposition already present in me.<sup>100</sup>

### *Reasons for Connecting Memory and Recollection*

All this being true, it is, however, a legitimate question why Aristotle would want to treat memory and recollection in a single treatise. There are at least four conceivable reasons.

First, Aristotle agrees with the common sense view that both memory and recollection are of past events.<sup>101</sup> It is true that the result of memory needs time to be established, while the result of recollection is instantaneous on a successful process, but both memory and recollection are working with the same past objects, only in completely different ways.<sup>102</sup>

Second, Aristotle would point to the fact that both memory and recollection demand a physical substrate. This is not surprising in the case of memory, being spatially located in the heart, but no physical organ is needed for thought, and thus no physical organ should be needed for recollection. Indeed, Aristotle does not specify a location of recollection; he does, however, say that recollection works by searching through images, and images are found in a corporeal substrate.<sup>103</sup> Thus, recollection works on a physical substrate, presumably the heart, which somehow contains the images.

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<sup>100</sup> This being an example to illustrate the differences between memory and recollection, I ignore the difficulties concerning whether or not pictures are involved in memory and recollection of such facts as a particular date.

<sup>101</sup> *Mem.* 449b17–23; 450a19–22; 453a10–14.

<sup>102</sup> Thus, my emendation of 453a6 (see my note *ad loc.*). See also, albeit in another context, Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 120a: “reminiscentia enim concernit tempus, sicut et memoria.” = “for recollection is concerned with time, just like memory is.”

<sup>103</sup> *Mem.* 453a14–31.

Third, even though Plato did conceptually separate memory and recollection,<sup>104</sup> the status of recollection in dialogues such as *Phaedo*, *Meno* and *Philebus* is best seen as an advanced form of memory.<sup>105</sup> Since recollection is furthermore very important in Plato's metaphysics and epistemology, Aristotle inherited an interest in this phenomenon from his great teacher.<sup>106</sup>

The above constitute the main reasons why Aristotle would treat memory and recollection in a single treatise. Fourthly, it might also be argued that, even though they are conceptually different, recollection will always begin from some kind of memory trace, and the final (although not the direct) result of the process will often be memory. Certainly, the final goal of such a process is memory. Recollection, as described in chapter 2, is a process entirely different from the memory described in chapter 1, but if it is also to be useful in the future to the person recollecting, the result must be committed to memory. This would explain why memory is still treated in parts of chapter 2 of the *De memoria*, if indeed that is the case. At the very least it is not true that memory words have invaded "even the official account of recollection",<sup>107</sup> and in fact I do not believe that chapter 2 is a mixed discussion of both memory and recollection, as most scholars would have it. Rather, I think that Aristotle is treating recollection pretty consistently throughout chapter 2, just as he treats memory in chapter 1. The arguments in favour of this claim will be presented below in the section "The Non-Existence of Memory Acts in Aristotle".

In conclusion, Aristotle makes careful distinctions between memory and recollection, and, broadly speaking, he treats memory as the philosophically interesting subject, recollection as a useful tool.

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<sup>104</sup> *Phd.* 73e; *Phlb.* 34b.

<sup>105</sup> See Lang (1980) 382.

<sup>106</sup> Cf. also Sorabji (2004<sup>2</sup>) 35–36 for the argument. Sorabji suggests that the important part of recollection in the training for dialectical debates made Aristotle treat the issue. See also Lang (1980) on the differences between Plato and Aristotle regarding memory and recollection.

<sup>107</sup> *Pace* Annas (1992a) 298.

*Modern Scholars on the Aristotelian Theory of Memory*

Some scholars have seen Aristotle as delineating two forms of memory, as defined by modern philosophers and psychologists, in describing memory and recollection.<sup>108</sup> Other scholars believe that Aristotle does distinguish between memory and recollection, but that he still has clear conceptions of both dispositional and active memory.<sup>109</sup> These theories, which are put forward as interpretations of Aristotle, will be treated later.<sup>110</sup> Aristotle has also been used by some philosophers as part of an historical treatment of memory and/or mental images, and in such cases the Aristotelian views are often somewhat distorted. I will mention only one illustrative example and treat it very briefly, but the number of examples could easily be enlarged. My example is Norman Malcolm and his *Memory and Mind* (1977).

Malcolm regards Aristotle as the first philosopher who was seriously concerned with delineating memory.<sup>111</sup> But Malcolm wrongly takes this to mean “memory” as used by all thinkers from antiquity to the present, and therefore he faults Aristotle for misrepresenting memory. In particular, Malcolm says, memory is *not* only of the past.<sup>112</sup> The misrepresenting is, however, done by Malcolm, not Aristotle, since Aristotle, as shown above (and as will be further substantiated below), defines μνήμη as a much narrower concept than the modern concept of memory. It seems to me, then, that Malcolm completely ignores the Aristotelian definition of memory in his refutation of Aristotle’s views.<sup>113</sup>

<sup>108</sup> Annas (1992a); Coleman (1992) 15–38. A similar idea is found in Byzantine sources, cf. e.g. Mich. Ephes., *In mem.* 19.2: ὥστε ἡ ἀνάμνησις ἐστὶ μνήμη τις; Theod. Metoch., *Paraphr. in mem.*, ed. Bloch (2005), 21: καὶ ἔοικεν εἶναι λοιπὸν μνήμη τις ἢ ἀνάμνησις.

<sup>109</sup> Sorabji (2004<sup>2</sup>). This view is naturally taken by scholars, since it makes it possible to interpret Aristotle in more or less modern terms.

<sup>110</sup> See the section “The Non-Existence of Memory Acts in Aristotle” (subsections “Richard Sorabji’s View” and “Julia Annas’ View”) below.

<sup>111</sup> Malcolm (1977) 13–15.

<sup>112</sup> Malcolm (1977) 13: “A little reflection on our actual use of language reveals that Aristotle was mistaken in supposing that ‘No one would say that he remembers the present, when it is present.’”

<sup>113</sup> Malcolm’s views on this subject were anticipated by Albert the Great and Thomas Aquinas, who were, however, somewhat more subtle, cf. Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 187a–b; Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 106a. See also White & Macierowski (2005) 240n29.

*The Non-Existence of Memory Acts in Aristotle**Introductory Remarks*

Since it was first published in 1972, Richard Sorabji's *Aristotle on Memory* has been the basic work on Aristotle's *De memoria*, and *eo ipso* on his views on memory and recollection. The book was well received by reviewers, and rightly so. Among other things, Sorabji brilliantly solves the problems surrounding the passage 452a17–26,<sup>114</sup> and I have benefited much from his discussion of mnemonic techniques and from his comments on individual passages of the text. I have one serious disagreement, however: I find that Sorabji has not provided a correct description of Aristotle's theory of memory, and that the error involved here is shared by all recent interpreters of Aristotle's views on this topic.

I have already sketched the Aristotelian theory of memory above, but I will now return to the issue and focus attention on the difficult subject of memory acts, which, as will be shown, has implications for the entire theory of memory. Thus, I will argue that Aristotelian μνήμη, in the considered version found in the *De memoria*, does not correspond precisely with any modern theory of memory, and that it is actually very different from present-day conceptions of memory. And since this is so, I believe it is necessary to obtain a more careful understanding of Aristotle's own views before e.g. attributing to him views similar to those of the British empiricists<sup>115</sup> and before ascribing to him a modern psychological distinction.<sup>116</sup> The idea that the theory of memory set forth in the *De memoria* is a narrow one compared to modern theories is not a novel suggestion,<sup>117</sup> but, as will be seen, the foundation on which I build is new.

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<sup>114</sup> See also my comment in the Textual Notes (*ad loc.*).

<sup>115</sup> Sorabji (2004<sup>2</sup>) 1.

<sup>116</sup> Annas (1992a).

<sup>117</sup> Cf. in particular G.R.T. Ross (1973<sup>2</sup>) 33–40. Similarly, the views of e.g. Ross (1955) 239 and Barash (1997) 710 that memory, according to Aristotle, is retention of the object are very narrow. A kind of compromise is found in Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 113b.

*Aristotle's Definition of Memory*

Returning, then, to Aristotle's theory of memory, chapter 1 of the *De memoria* ends by providing a definition:<sup>118</sup>

τί μὲν οὖν ἐστὶ μνήμη καὶ τὸ μνημονεύειν, εἴρηται, ὅτι φαντάσματος, ὡς εἰκόνοσ οὗ φάντασμα, ἕξις, ...

We have now stated what memory and remembering is, that it is the state of having an image, taken as a representation of that of which it is an image, ...

This is the final definition of memory, and it should be compared with the initial definition provided at the beginning of the text:<sup>119</sup>

ἔστι μὲν οὖν ἡ μνήμη οὔτε αἰσθησις οὔτε ὑπόληψις, ἀλλὰ τούτων τινὸς ἕξις ἢ πάθος, ὅταν γένηται χρόνος.

Memory, then, is neither sensation nor conception, but a state of having one of these or an affection resulting from one of these, when some time elapses.

The definition found in 451a14–16 is, I believe, likely to be the filling-in of the initial attempt.<sup>120</sup> Thus, the τούτων τινός has been carefully specified in the final definition. It is, at first glance, somewhat puzzling that the ὅταν γένηται χρόνος is not found in the final definition, but the fact that some time must pass before the state can be called memory is still part of the definition. In his elaborate analysis of the differences between memory and imagination,<sup>121</sup> Aristotle used εἰκὼν (ἄλλον) to describe the particular representation found in memory of a past object, and thus the ὅταν γένηται χρόνος can perhaps be said to be implied in the ὡς εἰκόνοσ οὗ φάντασμα of the final definition.<sup>122</sup> Anyhow, it is stressed in the immediately following sentence that memory belongs to a time-sensing faculty of the soul.<sup>123</sup> And finally, and very importantly, it must also be noted that memory is explicitly said in both passages to be a *state* (ἕξις or πάθος).

The only interesting difference between the two passages seems to be the omission of πάθος in the final definition, but even this turns

<sup>118</sup> *Mem.* 451a14–16.

<sup>119</sup> *Mem.* 449b24–25.

<sup>120</sup> A similar conception of the two passages is found in King (2004) 50–51.

<sup>121</sup> *Mem.* 450b18–451a12.

<sup>122</sup> So also King (2004) 51.

<sup>123</sup> *Mem.* 451a16–17: ... καὶ [scil. εἴρηται] τίνος μορίου τῶν ἐν ἡμῖν, ὅτι τοῦ πρώτου αἰσθητικοῦ καὶ ὃ χρόνον αἰσθανόμεθα.

out to be unimportant. Since 449b24–25 must be considered Aristotle’s broad attempt at a definition to be further developed in the following discussion, it is not surprising that he also wants to characterise the *state* of the remembering person as broadly as possible, both as a state of possessing something (ἔξις) and as a state of being affected by something (πάθος), that is, the having or suffering something respectively. This is only a difference of focus, however, and the “something” (that is, the object which is the cause of this state in the remembering person) is one and the same. In fact, Aristotle apparently thinks that both ἔξις and πάθος are proper terms to describe the state of the remembering person. Throughout the *De memoria* he uses either interchangeably,<sup>124</sup> and even though he ends up using only ἔξις to define memory, he employs both terms again at the beginning of chapter 2.<sup>125</sup> It must be concluded that they both signify the state found in memory, although with aspectual differences.<sup>126</sup> This, then, is the way that one would read the *De memoria*, if the text is read without any preconceptions, and there seem to be no good arguments for making a distinction between ἔξις and πάθος.<sup>127</sup>

Before continuing, a minor point must also be made as regards the translation of ἔξις. Sorabji was blamed by one reviewer for translating ἔξις as “having”, since, it was argued, the meaning of the term in the *De memoria* is rather “habit” or “lasting state”.<sup>128</sup> This criticism

<sup>124</sup> ἔξις ἢ πάθος: 449b24–25; 451a23–24; 451a27–29. ἔξις: 450a29–30; 451a14–16; 451b3–4. πάθος: 449b5; 450a25–27; 451a24–31. Some other occurrences of πάθος are not strictly speaking referring to memory: 450a1; 450b5; 450b11–13; 450b18; 451a24; 453a14–23.

<sup>125</sup> *Mem.* 451a23–24: ὅταν δ’ ἐγγένηται ἡ ἔξις ἢ τὸ πάθος, τότε μνήμη ἐστίν.

<sup>126</sup> This conclusion is against Beare (in his note 1 on 449b24 in the old Oxford translation edited by W.D. Ross 1908), but in complete agreement with Bonitz (1867) 29, and also, apparently, with King (2004) 27–28, 51–52. For more on this interpretation, see also the subsection “Richard Sorabji’s View” below.

<sup>127</sup> At least some of the Greek commentators agree, cf. conspicuously Theod. Metoch., *Paraphr. in mem.*, ed. Bloch (2005), 16: πάθος (εἴτουν ἔξις); 16: ἔξις (εἴτουν πάθος). For a contemporary reading of this kind, cf. e.g. Krell (1990) 13 (on πάθος in 449b4–6): “Memory as such he [*scil.* Aristotle] classifies as an affection or pathos; recollection or reminiscence he celebrates as an activity.” However, Georg. Pachym., *Paraphr. in mem.*, Berlin, Hamilton 512: 137<sup>v</sup>, has another suggestion: ἐξ αἰσθήσεως μὲν τὸ πάθος, ἐκ διδασκαλίας δ’ ἡ ἔξις. Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 106b suggests that the difference (between *habitus* and *passio*) is one of permanence vs. non-permanence, perhaps inspired by the *Categories* (8b25–9a13).

<sup>128</sup> Andriopoulos (1974) 126. He refers specifically to *Mem.* 450a30. For a similar view, see Beare’s note 1 on 449b24 in the old Oxford translation (ed. W.D. Ross 1908). King (2004) uses “Besitz”.



relies, I suppose, on a theory such as the one found in the *Categories*, but even in that text there is nothing to exclude “having” from the semantic content of the term. ἔξις certainly is a state, but it is a state of having something. And in fact, if one was forced to choose between the two translations “having” and “state” in the *De memoria*, the former would probably be preferable, since “state” does not, I believe, indicate equally clearly that the memory-image is *actually* present and viewed internally by the possessor of the state. However, the translation “state of having”, even if it is somewhat clumsy, preserves the best of two worlds.

As specified both in the initial attempt and in the final definition, the state which is present in memory is the state that one is in when one is actually viewing the memory image. Retention is not included.<sup>129</sup> This can be substantiated by arguments: If, as I have argued above, the image involved in memory is ontologically the same as the images in other (internal) processes, then the mere retention of this could not be called memory; additional features such as perception of time and perceiving the representational character of the image are also needed. And, as regards the initial attempt at a definition, retention is not the sort of state that can be confused with “sensation” or “conception”, whereas viewing an image may be thus confused. Of course, a πάθος is produced in a person or animal when perceiving, and this “affected state” in some sense serves the faculties of memory and imagination,<sup>130</sup> but this particular affected state is not the definition of memory. πάθος, as is well-known, is a very broad term in Aristotelian philosophy.

Aristotle, then, provides a single coherent definition on which he elaborates, but he never indicates that he is unhappy with it. Memory is defined as a “state” in the person or animal (both ἔξις and πάθος are states, as explained above), and it is a further condition that some time has elapsed since one obtained the perceptual or thought object. The image (φάντασμα) that is viewed when somebody is remembering is ontologically no different from images used in thought (νόησις) or

<sup>129</sup> Here I agree with G.R.T. Ross (1973<sup>2</sup>) 34, and see also King (2004) 28–30, 32; but W.D. Ross (1955) 239 thinks that ἔξις in the final definition signifies retention, and Barash (1997) 710 goes even further when he says that “[m]emory, according to Aristotelian theory, is defined as mere retention of past sense images.” Sorabji (2004<sup>2</sup>) also believes that memory is retention, but in a somewhat different sense (see the criticism below). See also Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 113b.

<sup>130</sup> *Mem.* 450a25–b11.

imagination (φαντασία);<sup>131</sup> what kind of process or state occurs is determined by the particular mode of viewing the image. To put it straightforwardly: The state of having an image and viewing it as representing something from the past is all there is to memory!

Before moving on to my main argument, a brief note is probably in order. For so far I have said nothing about one of the most discussed questions in Aristotelian scholarship when examining memory: does Aristotle's theory of memory involve the idea that, when a person remembers, he remembers not only something from the past but also that he *encountered* this something in the past?<sup>132</sup> The discussion has taken its point of departure from 449b18–24, and, as I will show in the following, this passage is not unambiguously concerned with memory (μνήμη). But, even if one accepts the foundation established by those who want to argue that personal experience with the content of a memory is part of remembering something, it is probably putting too much strain on the Aristotelian theory if it is claimed that such precise experience is always involved in remembering. Most importantly, personal memory of this kind is a rather sophisticated capacity, one that many modern philosophers and scientists are not prepared to attribute to any other living being than humans. However, on Aristotle's theory a lot of other animals have the capacity of memory, and must then be claimed to be capable of personal memory. It hardly seems likely that Aristotle would have agreed that animals, or at least not lowly animals, could possess such a capacity. But in fact, if one takes the usual views on the theory of memory presented in the *De memoria* (which I do not), then remembering the experience precisely as a personal encounter with the content of one's present memory simply is not required. Thus, in 452b29–453a4 Aristotle says that there are two ways to μεμνησθαι time: determinately and indeterminately. And if μεμνησθαι constitutes remembering, which is indeed the usual way of interpreting the passage, then the personal encounter with the object is not always part of remembering. For when one μέμνηται something with the indeterminate measure of time, which, according to Aristotle, can be very indeterminate as regards past tense, it cannot possibly be personal memory.

<sup>131</sup> This is, I believe, clear from *Mem.* 450b18–451a14. See also *EN.* 1147b2–5.

<sup>132</sup> For the discussion, cf. Sorabji (2004<sup>2</sup>) x–xi, 7, 68; Rowe (1974); Cooper (1975); Annas (1992a).

This having been said, it does, however, seem clear that Aristotle sometimes talks about remembering as of a past experience,<sup>133</sup> and memory is essentially a capacity that is capable of determining that something has happened in the past. Thus, some sort of awareness of the encounter seems to be implied, but I am not at all certain that Aristotle had worked out the details on this matter.

Also I should stress that this entire argument is based on the foundation that is assumed, I believe, by all interpreters of the *De memoria*, viz. that memory in the Aristotelian sense is referred to in 449b18–24 and in 452b29–453a4. As will become clear, I do not think that this is so. If I am right about this, then the entire discussion is built on a problematic foundation, and a new beginning will have to be made. However, I do not think that this was of great concern to Aristotle. Since memory is causally derived from perception, then, necessarily, one must have experienced the content before—and this applies to both human beings and animals. Whether or not the experiencing is part of the memory varies, I suppose, and is not a matter that has claimed Aristotle’s attention.

### *Memory and Terminology*

However, this reconstruction of a very limited Aristotelian theory of memory that I have offered will be rejected by recent interpreters of his theory. Although there is no agreement as regards this theory, it is generally taken for granted that the Greek *μνήμη* can be translated as “memory” and criticised from the point of view of contemporary philosophy of mind. In particular, it is maintained that Aristotle’s distinction between “memory” (*μνήμη*) and “recollection” (*ἀνάμνησις*) is not really a distinction between two quite different internal capabilities or states, but rather between two kinds of memory.<sup>134</sup> At the very least scholars regularly take their information about memory from both chapters of the *De memoria*, even though chapter 2 is explicitly dedicated to recollection. Not only do they introduce the idea of memory acts into Aristotle’s theory, then, but they also generally conceive of his ideas as very similar to present-day thought on the issues involved.

<sup>133</sup> Cf. Sorabji (2004<sup>2</sup>) 7–8n.

<sup>134</sup> Cf. in particular Annas (1992a). Sorabji (2004<sup>2</sup>) also takes his information about memory from both chapters of the *De memoria*, even though he does maintain the clear distinction between memory and recollection. See also Coleman (1992) 15.

*A priori* it would be very surprising if memory and recollection were both cases of “memory”. Aristotle is extremely careful in distinguishing between these two internal capabilities, with memory being a rather passive state, while recollection is an active process, that is, a kind of search or, even more strongly, a kind of deduction.<sup>135</sup> Correspondingly, they belong to different parts of the most basic distinction within the soul, that is, the sensing part<sup>136</sup> and the thinking part respectively. This is the reason why Aristotle stresses that there is a crucial difference between memory and recollection, since man is the only animal with the ability to recollect, whereas several animals have the capacity to remember.<sup>137</sup> To group memory and recollection as two species of a more general kind of memory is somewhat like categorising perceiving and thinking as two forms of “perceiving”, and this kind of procedure is severely criticised in the *De anima*.<sup>138</sup> Such a view, then, is not what one would expect from Aristotle. It must also be noticed that Aristotle upholds a clear distinction between memory and recollection also in the second chapter of the *De memoria*.<sup>139</sup> If chapter 2 differed from chapter 1 in regarding memory and recollection as two species of a generic “memory”, then it is strange that he, apparently, refers to the definition of memory in chapter 1 as being the authoritative statement on this issue.

However, Sorabji, Annas and others would claim to have one very strong argument in favour of their views: Aristotle, they would argue, uses “memory” words not only in the account of memory in chapter 1, but also in that of recollection in chapter 2.<sup>140</sup> If this is true, that is, if Aristotle really describes the process of recollecting as a kind of remembering, they have, of course, won their case without further argument.<sup>141</sup> I believe, however, that the argument contains a fundamental error,

<sup>135</sup> *Mem.* 453a12, 15: ζήτησις τις; 453a10, 14: συλλογισμός τις.

<sup>136</sup> Even though memory is not perception, according to Aristotle (*Mem.* 449b10–25), it is still to be noted that he does use the term αἰσθάνεσθαι (*Mem.* 450b11 ff.) for what goes on in the person who is remembering. For an interesting, modern parallel, cf. James Mill, *Analysis of the Phenomena of the Human Mind* (1829), cited from Warnock (1987) 15: “[the recollection is not itself a sensation, but] it is more like sensation than anything else can be; so like that I call it a copy, an image of the sensation.”

<sup>137</sup> *Mem.* 453a4–14.

<sup>138</sup> Cf. in particular *An.* I.2 & III.3. See also *Metaph.* 1009b12–17 and Thphr., *De sens.* §10 (= Diels 1965<sup>4</sup>: 502.7–9) for this idea in pre-Socratic philosophy.

<sup>139</sup> *Mem.* 451a18–b10; 453a4–14; 453b8–11.

<sup>140</sup> Cf. Annas (1992a) 298, 309–311. Sorabji (2004<sup>2</sup>) 1 has the same implications.

<sup>141</sup> Cf. Annas (1992a) 298: “The conclusion seems inescapable that for Aristotle there is a broad acceptable usage of ‘memory’ which covers two phenomena which the

which has made scholarly work on Aristotle's theories of memory and recollection very difficult. The issue is at bottom a terminological one.

Aristotle's terminology as regards memory and recollection has never, to the best of my knowledge, been considered problematic.<sup>142</sup> It is generally categorised as follows:

1. Remembering: μνήμη (noun); μνημονεύειν, μεμνήσθαι (verbs).
2. Recollecting: ἀνάμνησις (noun); ἀναμνησέσθαι (verb).

The major problem in this categorisation lies in the understanding of μεμνήσθαι. Sorabji explicitly addresses the meaning of the verbs μνημονεύειν and μεμνήσθαι with the following brief comment:

What sort of memory does Aristotle discuss? He uses two verbs for remembering, *mnēmoneuein* and *memnēsthai*. But as he does not seem to intend any distinction between them, they have not been given different translations.<sup>143</sup>

This comment agrees with standard Greek dictionaries, and, from the standpoint of contemporary thought, both verbs do indeed illustrate cases of remembering. But Aristotle has made a clear-cut distinction between μνήμη (to which μνημονεύειν, in his opinion, corresponds as the verbal form)<sup>144</sup> and ἀνάμνησις (to which ἀναμνησέσθαι corresponds). However, a thorough investigation as regards the categorisation (and translation) of μεμνήσθαι is still needed. The results of such an investigation are presented below and they show, I believe, that μεμνήσθαι does not signify “to remember” (in the strict Aristotelian sense), and thus is not to be categorised as a term synonymous with μνημονεύειν.

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natural scientist (the psychologist, we should say) needs to distinguish as memory proper and as recollection.”

<sup>142</sup> Sorabji (2004<sup>2</sup>) 35 has some reflexions on the etymology of ἀναμνησέσθαι, but they do not have great implications for understanding the Aristotelian text, and they are not relevant to the present question. See also Freudenthal (1869) 402–403.

<sup>143</sup> Sorabji (2004<sup>2</sup>) 1. Similarly, Annas (1992a) 298n4 explicitly groups both μνημονεύειν and μεμνήσθαι as “memory” words, and cf. also Freudenthal (1869) 402. But see the entries on the two terms in Bonitz (1870) 469b and 470b, who does not seem committed to the identity thesis. He rightly refers to 452a10 for the definition of μεμνήσθαι, not to the definition of μνήμη presented in 451a14–16. King (2004) 46 also acknowledges that μνημονεύειν and μεμνήσθαι are not simply identical.

<sup>144</sup> Cf., in particular, *Mem.* 449b4–6; 451a14–17; 453b8–11. Note also the other “memory” words such as μνημόνευμα (*Mem.* 450b27; 451a2) and μνημονευτά (*Mem.* 449b9; 450a24); εὐμνημόνευτα (*Mem.* 452a3).

*General Definitions of μνημονεύειν and μεμνήσθαι*

Here is a sketch of the views that I want to defend in the following:<sup>145</sup> μνημονεύειν (that is, being μνήμων) is the verb that Aristotle always uses when analysing and defining memory in *De memoria* 1.<sup>146</sup> Thus, this verb signifies “being in the (continuous) state of remembering”, which means, according to the Aristotelian theory, “being in the state of having an image, taken as a representation of that of which it is an image”.<sup>147</sup> The image is actually (not only potentially) present in the remembering subject, and viewed by him as something that belongs to past experience. I will argue that this is the meaning which must be assigned to the term in all its occurrences in the *De memoria*.

μεμνήσθαι, which I translate “to recall” or “to have recalled”, is used only once in the description of memory in chapter 1, and the context is difficult and disputed. Besides this singular example, all occurrences of the term is found in chapter 2, that is, the chapter dealing with recollection.

The natural point of departure when one is trying to define the meaning of μεμνήσθαι must be 452a10–12, in which passage Aristotle actually provides a kind of definition of the term. Thus, it is said that to μεμνήσθαι is to have in oneself a “moving potential” (τὸ ἐνεῖναι δύναμιν τὴν κινουῦσαν). This is said in order to distinguish recollection from relearning. In both cases one has previously had a particular experience but has later lost it; perhaps it was never part of memory, or perhaps it was simply forgotten. Recollection differs from relearning, because the recollecting subject is able to start a process in order to reobtain the object, that is, regain the experience. Having a moving potential (= τὸ μεμνήσθαι) is therefore the starting point of a recollective process, and such a starting point is an image, as is proved in particular by the description of the processes in 452a12–26 and in 453a14–31. Thus, the basic content of μεμνήσθαι is an image the content of which was formerly experienced by the subject, and which now functions as something that moves the possessor even further. This is a valid description of the starting point of the recollective process, but the

<sup>145</sup> For further elaboration of what is said in this section, see the following analysis of the individual passages in which the relevant terms occur.

<sup>146</sup> Cf., in particular, 449b4, 451a15. See also the conclusion of the entire work in 453b8.

<sup>147</sup> *Mem.* 451a14–16.

term can also be employed to focus attention on the endpoint, and so Aristotle does. In 452a12–26 it is described how one recollects by going through different midpoints (= images), until one arrives at the desired object, and it is explicitly stated that the person μέμνηται at the middle point that immediately precedes the desired object. That is, from this point he is moved to the desired object.

This analysis leads to the definition of μεμνησθαι as the having of an internal image that is capable of somehow moving the possessor. In chapter 2 this image is most often directly related to the recollective process, but it need not be. For instance, in 449b18–23 there is no talk of recollection; μεμνησθαι simply refers to the having of internal objects (= images), but on this occasion it seems to be focused on proceeding towards μνήμη. For it appears that, even though the image present in μεμνησθαι is not *per se* an instance of memory (according to the Aristotelian definition), the possessor can by his own efforts go on and actualise it as a memory image. This, I believe, is what is indicated by the phrases κατὰ τὸ μνημονεύειν ἐνεργεῖν and τῇ μνήμῃ ἐνεργεῖν; as will be seen from the table and the arguments below, these phrases generally occur in contexts where μεμνησθαι is used in the sense just described. In this sense, the definition of 452a10–12, *viz.* that in μεμνησθαι one is capable of proceeding towards a goal, is also relevant to the passages not specifically concerned with recollection, even though the definition is used in the context of 452a10–12 with a view to recollective processes. This somewhat peculiar state of having objects present to attention without “remembering” them (again according to the Aristotelian theory) will be further explained below.

So, the analysis of μεμνησθαι, as used in the *De memoria*, indicates that the term has two aspects:

1. Having brought forward an object (*scil.* an image) from which the conclusion (= the desired object) in the process of recollecting follows.
2. Having brought forward an object (*scil.* an image) that is capable of being used as a memory image.

A general definition of μεμνησθαι that covers both of these aspects is the following (my wording): “a dynamic state of having in oneself an object (= image) with the potential of moving the possessor to something that one has previously experienced, learned or thought.” In no. 1 attention is focused simply on obtaining a particular image as part of a process; in no. 2 attention is focused on making a particular image

a memory-image. Thus, *μεινῆσθαι* is a broad and vague description of the internal state of having an image that is capable of moving the possessor further.<sup>148</sup>

*The Similarities and Differences Between μνημονεύειν and μεινῆσθαι*

Based on this analysis of the two relevant terms, I will argue that Aristotelian memory (*μνήμη*), as defined in chapter 1 of the *De memoria*, is described verbally by *μνημονεύειν*, never by *μεινῆσθαι*. This might, however, seem a somewhat peculiar theory on my part for at least two reasons: (1) both *μνημονεύειν* and *μεινῆσθαι* would reasonably be called forms of “remembering” in modern terminology (and, admittedly, in ordinary Greek parlance), and, more importantly, (2) the states involved in *μνημονεύειν* and *μεινῆσθαι*, *viz.* having an internal image, seem to be, if not identical, then at the very least, extremely close to each other. Here are the significant similarities:

1. The content of both *μνημονεύειν* and *μεινῆσθαι* is an image.
2. Both *μνημονεύειν* and *μεινῆσθαι* are time related, since they both rely on previous experience with their object.
3. Both *μνημονεύειν* and *μεινῆσθαι* have representative character. That is, their object must represent something that has previously been experienced.

But still the two terms cannot be identical for a very simple reason: *μνημονεύειν* is defined as the state of having an image with the additional information present to the possessor that the image is something from the past;<sup>149</sup> *μεινῆσθαι*, on the other hand, is just the state of having an image that can move the possessor. Even though the image can in both cases only be retrieved, because the person has previously experienced the content, the direct awareness that it represents the past is a necessary content only of *μνημονεύειν*, not of *μεινῆσθαι*. This is proved in particular by the processes that Aristotle describes in 452a12–26. Here is his first example of a recollective process:

<sup>148</sup> Adam Schwartz points out to me that the term *πολιτεία*, as used in the *Politics*, may parallel *μεινῆσθαι* in having both a vague and broad usage and a more specifically defined meaning. Schwartz (2001) is a thorough analysis (in Danish) of *πολιτεία*. He cannot, however, be taken to agree with my interpretation of *μεινῆσθαι*.

<sup>149</sup> The extent of this awareness of the past is a matter of dispute. See also my discussion above (in the subsection “Aristotle’s Definition of Memory”).



... οἷον ἀπὸ γάλακτος ἐπὶ λευκόν, ἀπὸ λευκοῦ δ' ἐπ' ἀέρα, καὶ ἀπὸ τούτου  
ἐφ' ὕγρὸν, ἂφ' οὗ ἐμνήσθη μετοπώραν, ταύτην ἐπιζητῶν τὴν ὥραν.

... for instance, from milk to white, from white to air, and from this to moist, from which autumn is recalled, if this is the season that one is seeking.

When one moves on to the object that one was searching for (= the image representing autumn), the state is described as to μεμνήσθαι, but what is included is only the immediate representation of “autumn”. There is nothing to indicate that the state in question also includes cognition that one has previously experienced this particular autumn(-image). And in fact if we reflect on our own experiences of recollective processes, I believe that the first and immediate result is simply the object that we were searching for; only afterwards we might come to see that the image represents some particular experience from the past. There may be no time-gap of appreciable size, but the state of representing the object precedes the state of representing the object as something that was experienced in the past.

The theory that μεμνήσθαι represents only the retrieval of the objects, not the state present in Aristotelian memory, finds further support in the difficult passage 451a18–b10.<sup>150</sup> Recollection recovers previously experienced objects (perceptions, thoughts, learned items etc.).<sup>151</sup> It does not recover *memory* of these items, because there need not ever have been any memory of the items present in the person. But if the immediate result of recollection is μεμνήσθαι, then, at the very least, this term does not necessarily include remembering objects (in the Aristotelian sense).

The argument can be briefly sketched as follows: if one recalls objects that were not previously in the memory, then (i) the immediate result of recollection is designated μεμνήσθαι. But (ii) memory (μνήμη / μνημονεύειν) takes time to establish; it does not follow along with the establishing of the affection in the person. Thus, (iii) the immediate result cannot be memory (which is in fact also explicitly stated), and since no. (i) holds, μεμνήσθαι cannot be memory in the Aristotelian

<sup>150</sup> For interpretations, cf. Wiesner (1998); Sorabji (2004<sup>2</sup>) 88–93; King (2004) 110–116.

<sup>151</sup> In addition to 451a18–b10, cf. also 452a8–10: τοῦτο δὲ γίγνεται κινεῖν πολλά, ἕως ἂν τοιαύτην κίνησιν κίνησιν ἢ ἀκολουθήσει τὸ πρῶτον = “This happens [*scil.* recollection] when he moves many items, until he produces the sort of movement, which is followed by the thing that he seeks.” Notice that the result is not memory but “the thing” or object (τὸ πρῶτον).

sense. In fact, if one is distracted immediately upon having completed the recollective process, there will never be a more permanent state of having the objects internally, and thus memory will not follow.

There will, then, be at least some examples of *μνησθαι* that are not equal to the state found in *μνημονεύειν*. But what if the objects that one is recollecting *were* previously actual examples of memories? Or what if the specific goal of a particular recollective process is to recall a particular past experience? Would not the immediate result of the process be remembering, even in the Aristotelian sense? I think the answer to this question is “no”, for two reasons:<sup>152</sup> (1) First, as I have argued following Sorabji, recollection recovers objects, not memories, and Aristotelian memory is more than just viewing an internal object: it is a particular way of viewing the object, and this *modus spectandi* logically comes after the presence of the object.<sup>153</sup> (2) Second, it is interesting that whenever *μνησθαι* is used in relation to the Aristotelian theory of memory, it occurs in conjunction with the phrase *κατὰ τὸ μνημονεύειν/τῇ μνήμῃ ἐνεργεῖν*.<sup>154</sup> In fact, I believe that the reference in 450a19–21<sup>155</sup> proves that *μνησθαι* and this phrase are sometimes used synonymously, with *κατὰ τὸ μνημονεύειν/τῇ μνήμῃ ἐνεργεῖν* as an explanatory phrase providing the more precise meaning of *μνησθαι*. I will examine the use of this phrase more thoroughly when discussing 449b15–23, and here I will only state the conclusion: literally the phrase means “to actualise one’s memory”, and supported by the content of the individual passages of the *De memoria* and a passage from the *De motu animalium*,<sup>156</sup> I argue that this means “moving towards remembering”. This fits the

<sup>152</sup> And, as a possible third reason, if Caston (1998) 274, 292 is right in claiming that “a phantasma will have [the] exact same type of content as a sensory stimulation with the same powers to affect the central sensory organ”, then the state that one is in when the *φάντασμα* has been reobtained will not differ from the object immediately obtained in perception; as Aristotle says several times in *De memoria* 1, we are not remembering when we are actually and presently viewing or thinking about a present object. A view similar to Caston’s is found in Rapp (2001) 83–87. See also Everson (1997) 173.

<sup>153</sup> It must also be noticed that the retrieval of the object is not part of remembering according to the Aristotelian definition.

<sup>154</sup> *Mem.* 449b20; 452b23–29.

<sup>155</sup> The reference sums up 449b18–23, not just 449b22–23, but in 449b18–22 *μνησθαι* is used. Notice also that in 449b22 this sentence, using *κατὰ τὸ μνημονεύειν ἐνεργεῖν*, is introduced by *γάρ*, in order, I suppose, to explain the content of the preceding sentence.

<sup>156</sup> *MA.* 701a29–30.

interpretation presented above that there are different aspects of the relatively vague term *μεμνήσθαι*, but, if my interpretation of *κατὰ τὸ μνημονεύειν/τῇ μνήμῃ ἐνεργεῖν* is correct, it also proves that *μεμνήσθαι* on its own cannot be *μνημονεύειν*. Before the content is “remembered”, one must actualise the memory in relation to the objects represented. Again, this may well happen instantly in some (or perhaps even most) cases, but it need not happen, and even when it does, the representation found in *μεμνήσθαι* is logically prior to the state of having the representation as a memory image.

However, it may be permissible to speculate that the state of *μεμνήσθαι* cannot be a more permanent state but is dynamic relative to a result and thereby temporary. When the full potential has been realised, it will no longer be a case of *μεμνήσθαι*. Thus, it is not on a par with the state of remembering. For instance, if a person completes a process of recollection, he or she *μέμνηται*, but this result will either be lost again or it will, in time, proceed to become a memory. In neither case is it any longer described as a case of *μεμνήσθαι*. My point here is simply this: the *De memoria* has not, in my interpretation, been turned into a treatise examining three internal capabilities instead of two; *μεμνήσθαι* is not a full-fledged capacity or permanent state equal to memory and recollection.<sup>157</sup>

Note further that on the proposed interpretation of *μεμνήσθαι* the term is relevant to both memory (*μνημονεύειν*) and recollection (*ἀναμνησθαι*), although it is not identical with either. The continuous state of memory requires some sort of preceding activity, since one needs the image to arise in the soul before the state of proper remembering can occur; the retrieval of the image is not included in Aristotle's theory of memory. And recollection is strictly speaking a process towards a goal. *μεμνήσθαι* implies the action of retrieving an image, but the explicit reference is to obtaining a goal. Thus, it is a starting point with a moving potential towards an (internal) object, and the resulting movement can lead to the end of a recollective process, but it can also lead to memory, depending on what is going on in the person experiencing the movement.

In the following, I will use the text of the *De memoria* in an attempt to substantiate and test the distinction between *μνημονεύειν* and *μεμνήσθαι*

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<sup>157</sup> The thoughts set forth in this last paragraph were inspired by Troels Engberg-Pedersen, who cannot, however, be held responsible for the use I have made of his comments.

that I have now introduced. It must be noted that there are two points to be made in the argument:

1. I attempt to establish generally that current views on the terminology must be revised. This is indicated already by etymology,<sup>158</sup> and it can, in my opinion, be conclusively shown with reference to the distribution of terms in the two chapters of the *De memoria*. The use of the two terms will be analysed in the following.
2. The more difficult argument concerns the precise meaning of the terms. I argue in favour of the structure that I have sketched above. This part must be argued through an extensive analysis of the *De memoria*.

I hope that the arguments presented below prove both points. But still, it must be noted that even if only no. 1 is accepted, it will present difficulties for the usual interpretations of the Aristotelian theories.

#### *A Note on Etymology and Grammar*

Note first that etymology and grammar do not demand the categorisation and translation proposed by Sorabji and others.<sup>159</sup> On the contrary, it is *a priori* reasonable to assume that μεμνήσθαι is even closer to ἀναμνήσκεσθαι than to μνημονεύειν, since the former is simply a compound of the same verb, while the latter is a different verb (although with the same root). Even grammatically, then, there is the relationship between μεμνήσθαι and ἀναμνήσκεσθαι that I have just claimed to exist on philosophical grounds: ἀναμνήσκεσθαι is an active process of recollecting or recalling something (re-μμνήσκεσθαι), and the completion is naturally stated by the same verb, signifying this completion by losing the ἀνα-prefix and by being naturally in the perfect tense.<sup>160</sup>

<sup>158</sup> See the following subsection below.

<sup>159</sup> For scientific discussions of the etymologies, cf. Hofman (1949) 196–197, 202; Frisk (1960–1972, vol. II) 238–241; Chantraine (1968–1980, vol. III) 702–703.

<sup>160</sup> That this verb naturally is a perfect tense verb does not alter the argument. It simply illustrates the modes of thought involved in the use of the verb. Of course, it should be noted that in 452a12–26 both μνησθῆναι (three times) and μνησθήσεσθαι (twice) are also used. The futures can be explained as “will recall”, and two occurrences of μνησθῆναι are used to convey past tense. Only in 452a24 I am uncertain how to explain μνησθῆναι.

*Occurrences of μνημονεύειν and μεμνήσθαι in the De Memoria*

However, the most basic foundation, and thus the initial reason for suspicion regarding the claim that μνημονεύειν and μεμνήσθαι are synonymous, is that the distribution of these verbs in the two chapters of the *De memoria* is very uneven. For whereas μνημονεύειν is found frequently, referring to memory, in chapter 1, μεμνήσθαι only occurs once in that chapter, and the text is difficult and disputed for several reasons. In chapter 2, on the other hand, μεμνήσθαι is used much more frequently, but the reference is never to the definition of memory proposed in chapter 1, while μνημονεύειν in this chapter still refers to this definition. At least, that is the argument that I want to present.

The following table lists all occurrences of the two verbs μνημονεύειν and μεμνήσθαι in the *De memoria*.<sup>161</sup>

<i>De memoria</i>	μνημονεύειν	μεμνήσθαι
Chapter 1	449b4; 449b11; 449b16; 449b22; 449b29; 450a27; 450b12; 450b14; 450b14–15; 450b19; 451a10–11; 451a15.	449b20.
Chapter 2	451a28; 451a29; 451a30; 451a31; 451b1; 451b5; 451b16; 452b5; 452b25; 452b26 (twice); 453a6; 453a7; 453b8; 453b9.	451b26; 452a7; 452a10; 452a16; 452a18; 452a20 (twice); 452a22–23; 452a24; 452b27; 452b28; 452b29; 452b30; 453a2; 453a3.

Thus, there are 12 occurrences of μνημονεύειν and 1 of μεμνήσθαι in the first chapter, while there are 15 occurrences of μνημονεύειν and 15 of μεμνήσθαι in the second chapter. Through an analysis of these occurrences I will try to substantiate the theories that I have proposed.<sup>162</sup> Considering the points that have already been made, a new interpretation of the terms seems to be needed.

<sup>161</sup> For occurrences in other Aristotelian texts, cf. appendix 1 to this essay.

<sup>162</sup> Annas (1992a) 298n4 presents a list of some occurrences of μνημονεύειν and μεμνήσθαι in *Mem.* 2, but I disagree with her claim that “[i]n all these occurrences the reference is to recollecting.”

*Memory Words in the De Memoria 1*

First, it must again be stressed that the memory (μνήμη) treated in chapter 1 is referred to exclusively by the term μνημονεύειν, never by the term μεμνησθαι. The one occurrence of the term μεμνησθαι in *De memoria* 1 can be explained from the content of the passage. The wording is as follows:<sup>163</sup>

ἡ δὲ μνήμη τοῦ γενομένου· τὸ δὲ παρὸν ὅτε πάρεστιν, οἷον τοδὶ τὸ λευκὸν ὅτε ὄρεᾶ, οὐδεὶς ἂν φαίη μνημονεύειν, οὐδὲ τὸ θεωρούμενον, θεωρῶν καὶ ἐννοῶν· ἀλλὰ τὸ μὲν αἰσθάνεσθαι φησιν, τὸ δ' ἐπίστασθαι μόνον· ὅταν δ' ἄνευ τῶν ἔργων σχῇ τὴν ἐπιστήμην καὶ τὴν αἴσθησιν, οὕτω μέμνηται [τάς τοῦ τριγώνου ὅτι δύο ὀρθαῖς ἴσαι], τὸ μὲν ὅτι ἔμαθεν ἢ ἐθεώρησεν, τὸ δ' ὅτι ἤκουσεν ἢ εἶδεν ἢ τι τοιοῦτον· αἰεὶ γάρ ὅταν ἐνεργῇ κατὰ τὸ μνημονεύειν, οὕτως ἐν τῇ ψυχῇ λέγει, ὅτι πρότερον τοῦτο ἤκουσεν ἢ ἤσθητο ἢ ἐνόησεν.

Now, memory is of the past; and nobody would claim to remember the present, when it is actually present, for instance, that he is remembering this particular white object when he is in fact looking at it, nor would he claim that he is remembering an object of contemplation while contemplating and thinking about it; one can only claim to sense the white object and know the object of contemplation. However, when one has knowledge and sensation without performing these actions, then he recalls, in the case of knowledge because he has learned it or contemplated it, in the case of sensation because he has heard or seen it or sensed it in some other way; for it is always the case that when a person actualises as regards his memory, what he does is to say in his soul that he has previously heard, sensed or thought about this.

Aristotle says that memory is always of the past, and that we do not call it “remembering” (μνημονεύειν) when we are in the process of thinking or perceiving something. However, when these same objects, that is, knowledge (= the object of thinking) and perceptual objects, are in us, even though we are not exercising the faculties of thinking or perceiving, then the situation is that the person recalls (μέμνηται) them as something that he or she has formerly experienced. As I have argued on the basis of 451a18–b10 and 452a12–26, the objects of any previous experience (epistemic or perceptual) may well be present in a person without thereby being the state that Aristotle calls “remembering”. What Aristotle is stressing in the present passage is that there is a third possibility as regards having internal objects. In perception and thinking, one is

<sup>163</sup> *Mem.* 449b15–23. For the deletion of τάς τοῦ τριγώνου ὅτι δύο ὀρθαῖς ἴσαι in 449b20, cf. the Textual Notes (*ad loc.*) below.

perceiving and contemplating some object, but there is a third way of obtaining an internal object. Thus, when the objects are present in the person without the physical objects or the original thoughts still being present, the person has *recalled* them.<sup>164</sup> But to have the objects present is not *per se* remembering. Rather, it is a description of something that can lead to remembering, *viz.* the description of attending to the objects formerly experienced, and at the same time having the potential to move towards real memory. So, what Aristotle is doing is to describe the third way in which one has internal objects, the way that ideally leads to remembering. All that has been said, then, is that the person brings forward something in himself or herself that was formerly an object of perception or thought. Thus, this single example of *μεμνήσθαι* in chapter 1 is an example of the usage no. 2 mentioned above:<sup>165</sup> recalling objects formerly experienced and retained in the person, and with a view to proceeding to remembering. So, when they have been brought forward, they can be viewed in the mode that constitutes memory. From a present-day point of view bringing forward the images is also remembering (and this is also true for ordinary Greek parlance),<sup>166</sup> but from Aristotle's point of view it is not, since the definition of remembering does not involve bringing forth the internal objects; and even though the internal objects are present to our immediate attention, it is possible that they are not examples of remembering, according to the Aristotelian theory—however strange this may sound at first hearing.

That *μεμνήσθαι* is not here equal to *μνημονεύειν* and that *μνημονεύειν* proper does not involve the bringing forth of internal objects are also indicated by the following line,<sup>167</sup> in which Aristotle uses a phrase that recurs in two forms several times in the *De memoria*: *τῇ μνήμῃ ἐνεργεῖν* or *κατὰ τὸ μνημονεύειν ἐνεργεῖν*.<sup>168</sup> First, I will try to establish a precise meaning of these phrases. I have found no reason to think that *τῇ μνήμῃ ἐνεργεῖν* and *κατὰ τὸ μνημονεύειν ἐνεργεῖν* do not signify the same.

<sup>164</sup> Note that Aristotle (449b18–19) is focusing attention specifically on the *objects*, not on *memory*. On my interpretation of *μνημονεύειν* and *μεμνήσθαι*, then, the latter is the best term to use.

<sup>165</sup> See the subsection “General Definitions of *μνημονεύειν* and *μεμνήσθαι*” above.

<sup>166</sup> Cf. the revealing remark in 451a29–30: *τὸ δὲ μνημονεύειν καθ’ αὐτὸ οὐχ ὑπάρχει πρὶν χρόνισθῆναι* = “however, remembering does not essentially exist before some time has elapsed”. The *καθ’ αὐτὸ* (“essentially”) seems to indicate that any internal representation of past objects may well be described with the use of *μνήμη* and *μνημονεύειν* in ordinary Greek parlance.

<sup>167</sup> *Mem.* 449b22–23.

<sup>168</sup> *Mem.* 449b22; 450a19–20; 450b17–18; 452b24; 452b26.

Their frequent occurrence in the *De memoria* suggests that they serve to stress something not stressed in the regular *μνήμη* and *μνημονεύειν*, and the use of *ἐνεργεῖν* would naturally seem to indicate that the distinguishing feature of the two phrases is that of an *act* or *activity*. Hence, the literal translations “to be active by memory” or “to be active by remembering”. This phrasing brings to mind the regular Aristotelian distinction between “state (of having)” (*ἔξις*) and “activity” (*ἐνέργεια*)<sup>169</sup>—not least because of the fact that memory is categorised as a “state” according to Aristotle’s theory. But since the state of having an image *is* what occurs in remembering, there is no obvious place for an active remembering in the Aristotelian theory.<sup>170</sup> However, there is a particular problem in Aristotle’s theory of memory that needs explanation, and here the active phrases would seem appropriate: *viz.* the moving from not-remembering to remembering. On this view, the phrases describe the goal-directed action of activating the memory. Thus, I suggest that *τῇ μνήμῃ ἐνεργεῖν* and *κατὰ τὸ μνημονεύειν ἐνεργεῖν* mean something like “applying one’s capability of remembering to an object (epistemic or perceptual) and thus bringing about the state of remembering” or, more simply, “moving towards remembering”. The suggestion of a goal-directed action that causes movement towards the object of whatever state or capability is involved is also supported, I think, by the following passage from the *De motu animalium*:<sup>171</sup>

ὅταν γὰρ ἐνεργήσῃ ἢ τῇ αἰσθήσῃ πρὸς τὸ οὗ ἕνεκα ἢ τῇ φαντασίᾳ ἢ τῷ νῷ, οὗ ὁρέγεται, εὐθὺς ποιεῖ.

For when a person is active, either by sensation in relation to that for the sake of which, or by imagination, or by mind, he immediately does that which he desires.

<sup>169</sup> Cf. e.g. *Top.* 125b15–19; *EN.* 1098b33–1099a3. For more passages, cf. Bonitz (1870) 251a, s.v. *ἐνέργεια*.

<sup>170</sup> However, scholars have generally taken the phrases as just another description of “remembering”. See e.g. the translations by G.R.T. Ross (1973<sup>2</sup>) 101: “When one actually remembers ...”; Sorabji (2004<sup>2</sup>) 48: “For whenever someone is actively engaged in remembering ...”. My ideas on the meaning of the phrase are more in line with Beare’s translation (in the old Oxford-translation edited by W.D. Ross 1908): “For whenever one exercises the faculty of remembering ...”. Sorabji (2004<sup>2</sup>) 58 has a similar translation of the phrase in 452b23–29 (“exercising his memory”), but still thinks of it as actively remembering.

<sup>171</sup> *MA.* 701a29–30. See also *Top.* 146b13–19, *Sens.* 446a20–25 and, possibly, *An.* 431a10–11. The *De motu animalium* passage is, however, the best evidence and not found in a dialectical context as e.g. the *Topics* passage is. The possibility of different uses of *ἐνεργεῖν* + dative (or + prepositional phrase) is illustrated by the wording in *Somn.* 454b13



This sentence—which is a little more elaborate than the parallel ones in the *De memoria* and crucially so—nicely illustrates that the actualisation is directed towards the object of the activity, an object that is not yet possessed. That is, ἐνεργεῖν signifies the transition from the potential for something to actually doing it, not simply the latter.<sup>172</sup>

This seems to me a relatively simple solution to the problem concerning the meaning of the ἐνεργεῖν phrases, and at the very least it must, I think, be admitted that τῇ μνήμῃ ἐνεργεῖν and κατὰ τὸ μνημονεύειν ἐνεργεῖν cannot be synonymous with μνημονεύειν: since μνημονεύειν is explicitly characterised as a state (ἔξις or πάθος), it cannot possibly cover the same conceptual ground as τῇ μνήμῃ ἐνεργεῖν and κατὰ τὸ μνημονεύειν ἐνεργεῖν, which are used precisely in opposition to states. This is interesting in the argument concerning μνημονεύειν and μεμνησθαι, not least if, as I will now argue, the ἐνεργεῖν phrases are used in the *De memoria* to characterise and clarify a particular use of μεμνησθαι.

Returning, then, to the meaning of μεμνησθαι, it is interesting that ὅταν κατὰ τὸ μνημονεύειν ἐνεργῇ is explicitly used as a clarification of what has previously been said in the passage containing μεμνησθαι. In particular, the particle γάρ (“for”) that introduces the ὅταν κατὰ τὸ μνημονεύειν ἐνεργῇ-clause links the two sentences. Furthermore, the present passage is not a singular example. An identical use is found in 452b26–27, where ἐνεργοῦντα ... τῇ μνήμῃ is used to describe μεμνημένον. And finally, in 450a19–21 Aristotle refers to the whole analysis given in 449b18–23, but in the reference he writes only ὅταν ἐνεργῇ τῇ μνήμῃ; the term μεμνησθαι is not used. So, μεμνησθαι and the phrases τῇ μνήμῃ ἐνεργεῖν and κατὰ τὸ μνημονεύειν ἐνεργεῖν are frequently linked in the *De memoria*, and always with the latter being used to clarify the former. This makes good sense on the interpretation that I have proposed, since μεμνησθαι is a broad term with different aspects, while the two ἐνεργεῖν-phrases are more specifically aimed at only one of these aspects.

The passage that has now been discussed is the only one in chapter 1 in which μεμνησθαι occurs, and it has been argued that μεμνησθαι

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(my emphasis): ἐνεργεῖν δὲ τῇ αἰσθήσει κυρίως καὶ ἀπλῶς = “But to actualise by sensation in the proper and unqualified sense of the words.”

<sup>172</sup> If I understand him correctly, this is also the point in Burnyeat (2002) 67, 72 concerning vision. The difference between vision and memory is, however, that properly speaking there is no transitional *process* in seeing when going from potentiality to actuality, and thus transition and actuality merges here, according to Burnyeat.

does not here mean “remember”—that is, in the Aristotelian usage. However, even if one is not convinced by the arguments, the statistics presented above for chapter 1 make the usual interpretation of *μνησθαι* and *μνημονεύειν* as synonymous doubtful. In the entire analysis and definition of “memory” *μνημονεύειν* is used, and memory is explicitly defined as a state, not an act. The term *μνησθαι*, on the other hand, refers to (the potential for) some kind of act in 449b15–23, as is proved conclusively by the following clarification *κατὰ τὸ μνημονεύειν ἐνεργῆ*, which incidentally is a phrasing that supports the thesis that *μνημονεύειν* on its own cannot be an activity.

### *Memory Words in the De Memoria 2*

Chapter two of the *De memoria* is concerned primarily with recollection (*ἀνάμνησις*), but that is not the only issue treated in the chapter. The first part makes conceptual distinctions between recollection and other internal states and processes;<sup>173</sup> the middle, and main, part<sup>174</sup> is taken up almost exclusively by a thorough analysis of recollection, with only a slight digression<sup>175</sup> to make yet another comment on the conceptual distinction between recollection and relearning.<sup>176</sup> The final part,<sup>177</sup> with the exception of an important passage on the physiological processes involved in recollection,<sup>178</sup> has usually been regarded as treating issues relevant to both memory and recollection. It seems to me, however, that most of this passage can be construed as still being concerned with recollection. This means that, even though the table lists 15 occurrences of each verb in chapter 2, quite a few of them are not in fact related to the process of recollection. In particular, I shall argue that none of the occurrences of *μνημονεύειν* refers to anything other than remembering as described in chapter 1, and that *μνησθαι* never refers to this kind of remembering.

Of the 15 occurrences of *μνημονεύειν* the first six passages are found in the first part of the chapter and are thus part of the section that deals

<sup>173</sup> *Mem.* 451a18–b10. For interpretations of this difficult passage, cf. Ross (1955) 239–240, 243–245; Wiesner (1998); Sorabji (2004<sup>2</sup>) 88–93; King (2004) 110–116.

<sup>174</sup> *Mem.* 451b10–452b6.

<sup>175</sup> *Mem.* 452a4–12.

<sup>176</sup> Annas (1992a) 298n4 believes that this is actually the point of the entire passage *Mem.* 451b10–452b6.

<sup>177</sup> *Mem.* 452b6–453b11.

<sup>178</sup> *Mem.* 453a14–31.

with conceptual distinctions. The first four are in complete accordance with the description of memory in chapter 1, and are in fact used to summarise part of the theory;<sup>179</sup> the last two are equally clearly referring to the Aristotelian theory of memory, since they are used to contrast memory and recollection.<sup>180</sup> The two occurrences in 453a6 and 453a7 are also examples of contrasting memory and recollection.<sup>181</sup> In the last two occurrences in the table Aristotle is summarising the results of the entire treatise, and again he is making a distinction between memory and recollection.<sup>182</sup> All of these occurrences are found in those parts of chapter 2 that are not concerned with defining recollection, and they have never, to the best of my knowledge, been taken to refer to recollection or to a kind of memory different from the one that Aristotle analysed in chapter 1.

This leaves only five occurrences of *μνημονεύειν* to be investigated. First, three of the occurrences are found in the last part of the chapter in a section,<sup>183</sup> which claims that recognition of both the object and time are necessary constituents in “actualising one’s memory”. The relevant passage is the following:<sup>184</sup>

ὅταν οὖν ἅμα ἢ τε τοῦ πράγματος γίνηται κίνησις καὶ ἡ τοῦ χρόνου, τότε τῇ μνήμῃ ἐνεργεῖ.—(1) ἂν δ’ οἴηται μὴ ποιῶν, οἶεται μνημονεύειν· οὐδὲν γὰρ κωλύει διαψευσθῆναι τινα καὶ δοκεῖν μνημονεύειν μὴ μνημονεύοντα. (2) ἐνεργοῦντα δὲ τῇ μνήμῃ μὴ οἶσθαι ἀλλὰ λανθάνειν μεμνημένον οὐκ ἔστιν· τοῦτο γὰρ ἦν αὐτὸ τὸ μεμνησθαι.—ἀλλ’ ἐὰν ἡ τοῦ πράγματος γένηται χωρὶς τῆς τοῦ χρόνου ἢ αὕτη ἐκείνης, οὐ μέμνηται.

Thus, when both the movement of the thing and the movement of the time occur simultaneously, then one actualises his memory.—(1) And if one thinks that he does, without really doing so, he thinks that he remembers; for there is nothing to prevent that one is deceived and thinks he remembers, when he is really not remembering; (2) but when

<sup>179</sup> *Mem.* 451a28, 29, 30, 31.

<sup>180</sup> *Mem.* 451b1, 5.

<sup>181</sup> *Mem.* 451a31–b1: ἔτι δὲ φανερόν, ὅτι μνημονεύειν ἔστι μὴ νῦν ἀναμνησθέντα, ...; 451b4–6: ... τοῦτ’ ἔστι καὶ τότε τὸ ἀναμνησθεσθαι τῶν εἰρημένων τι, ἥ τὸ δὲ μνημονεύειν συμβαίνει καὶ μνήμη ἀκολουθεῖ; 453a6–9: διαφέρει δὲ τὸ μνημονεύειν τοῦ ἀναμνησθεσθαι οὐ [μόνον] κατὰ τὸν χρόνον, ἀλλ’ ὅτι τοῦ μὲν μνημονεύειν καὶ τῶν ἄλλων ζώων μετέχει πολλά, τοῦ δ’ ἀναμνησθεσθαι οὐδὲν ὥς εἰπεῖν τῶν γνωριζομένων ζώων, πλὴν ἀνθρώπου.

<sup>182</sup> *Mem.* 453b8–11: Περὶ μὲν οὖν μνήμης καὶ τοῦ μνημονεύειν, τίς ἡ φύσις αὐτῶν καὶ τίνα τῶν τῆς ψυχῆς μνημονεύει τὰ ζῶα, καὶ περὶ τοῦ ἀναμνησθεσθαι, τί ἔστι καὶ πῶς γίγνεται καὶ διὰ τίν’ αἰτίαν, εἴρηται.

<sup>183</sup> *Mem.* 452b6 ff.

<sup>184</sup> *Mem.* 452b23–29.

one is actualising his memory it is not possible that he does not think he is, but is unaware that he is recalling; for this is what recalling essentially was.—But if the movement of the thing occurs separately from the movement of time, or if the latter occurs separately from the former, then one does not recall.

In this passage Aristotle describes two different scenarios (which I have indicated by inserting numbers in the text):

1. A person thinks he is remembering but is not really doing so.
2. A person is actualising his memory and recalling something but does not think he is or does so.

The first scenario, Aristotle says, is possible, the second is not. Note initially that case no. 1 is described using only *μνημονεύειν* (three times), while case no. 2 is described using only *μεμνήσθαι* (three times) and *τῇ μνήμῃ ἐνεργεῖν* (once).<sup>185</sup> Thus, there is no real mixing of terms in the passage, even though there may at first sight appear to be, and the distribution of terms thus indicates a difference in meaning.

I consider first what is, in my opinion, a more general benefit that derives from my views on *μνημονεύειν* and *μεμνήσθαι*: The passage that has just been quoted is usually seen as concerned primarily with memory, or a very general form of memory comprising both recollective and non-recollective memory, and therefore its sudden occurrence in the chapter on recollection fits uncomfortably into the overall scheme of the work.<sup>186</sup> Aristotle does not describe a form of remembering but rather the way to remembering, that is, the process that precedes memory; and this process is regularly recollection or the result of recollection. The passage, then, is, so to speak, an analysis of how to proceed from the result of recollection to remembering.

Even though 452b23–29 follows upon a very difficult passage, the interpretation of which is extremely uncertain,<sup>187</sup> the subject seems to be movements of the thing and time, *viz.* what happens when they

<sup>185</sup> Furthermore, *τῇ μνήμῃ ἐνεργεῖ* (452b23) corresponds with *μέμνηται* (452b29).

<sup>186</sup> Cf. Sorabji (2004<sup>2</sup>) 108 (*ad* 452b7): “This evidently concludes the discussion of the manner of recollection. More will be said about recollection later. But the next portion, on judging temporal distances, applies to all remembering, whether it be the result of recollection, or not.” Similar views are found in Annas (1992a) 298 and King (2004) 47. However, Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 127a–b, 129b sees that recollection is still the primary object of investigation.

<sup>187</sup> For proposed interpretations, cf. Ross (1955) 249–252; Sisko (1996); Sorabji (2004<sup>2</sup>) 18–21, 108–110; King (2004) 136–139. I have no strong views regarding this passage, and I am uncertain whether the difficulties can be sufficiently solved.

occur simultaneously, and what happens when they do not. In the present passage it is initially stated that when they do occur simultaneously, the person “actualises his memory” (τῇ μνήμῃ ἐνεργεῖ), and in conclusion it is said that when they do not, he “does not recall” (οὐ μέμνηται).<sup>188</sup> Thus, analysing the occurrence and the non-occurrence respectively, Aristotle uses these two different descriptions, which, I take it, must therefore indicate the same meaning.

Here is my general interpretation of the passage: Aristotle wants to say that in moving towards memory one must coordinate the movements representing the objects and the movements representing their place in time. This will often start out as a recollective process, and Aristotle probably refers to remembering and moving towards remembering, because, as we have seen, from the having of the object alone one can either allow it to be lost again or move towards remembering. The latter can only occur by combining object and time. If it is done correctly, one will end up remembering (not explicit in the text), but if it is thought that it is done correctly, although this is not actually the case, then one will think wrongly that one remembers. This is the first scenario.<sup>189</sup> But—and this is the second scenario<sup>190</sup>—when one is actually in the process of actualising the memory and recalling, no mistake about the fact that this is what one is doing is possible.<sup>191</sup> The person will, so to speak, be carried forward by necessity towards remembering (not explicit in the text): “for this is what recalling essentially was”, Aristotle says, referring to the fact that he has previously defined “recalling” as an internal moving potential towards the desired

<sup>188</sup> *Mem.* 452b23–24; 452b28–29.

<sup>189</sup> *Mem.* 452b24–26. For the possibility of mistakenly thinking that one is remembering, cf. *Mem.* 451a2–12.

<sup>190</sup> *Mem.* 452b26–28.

<sup>191</sup> The same interpretation in King (2004) 139 (*ad* 452b23–453a4): “Man täuscht sich jedoch nicht hinsichtlich des Vorgangs—des Mit-dem-Gedächtnis-tätig-Seins—obwohl man bezüglich des Gedächtnisinhaltes Unrecht haben kann.” Apparently also in Milano, Ambr. H 105 inf., f. 23<sup>ra</sup> (see the apparatus in Gauthier 1985: 129). It is, however, somewhat disturbing that Aristotle first declares that a person can think that he is actualising his memory, although he is not really doing this, and immediately goes on to say that a person will always know when he is actualising his memory. This problem is present, I think, no matter how one interprets the relevant terms in the passage. Thus, I must explain this as careless language for “if one thinks that he has successfully completed a process of actualising his memory, then the result is that he thinks that he remembers.” This may gain support from the fact that in other cases, e.g. perception as argued by Burnyeat (2002), actualising and result occur simultaneously and therefore the terminology may easily become blurred.

object. Thus, the reference is made to *Mem.* 452a10–12. However, the commentators generally believe that Aristotle refers to the theory of memory in chapter 1,<sup>192</sup> but that presupposes the identity of *μνημονεύειν* and *μνησθαι*, and even if they could be so construed, I do not understand the purpose of such a reference in the present passage. In fact, it seems that one saves Aristotle from inconsistency by interpreting this as a reference to 452a10–12 rather than to chapter 1. For if Aristotle meant that memory is “essentially being aware that one is remembering”, then, as pointed out e.g. by Sorabji,<sup>193</sup> he “unwittingly violates” his own theory in 451a2–5. In conclusion to the passage, Aristotle presents the contrary of the situation just described.<sup>194</sup> There are also cases, he says, in which the internal movements of object and time are not correlated, and in such cases one cannot move towards remembering (*οὐ μέμνηται*).

So, in conclusion, I do not think that *μνημονεύειν* and *μνησθαι* should be interpreted as synonymous in this passage either. The former refers to remembering, according to the theory of chapter 1, while the latter exemplifies the definition of 452a10–12 with the aspect of moving towards *remembering*, not just towards the internal objects.<sup>195</sup>

The last two occurrences of *μνημονεύειν* are both found in the part of chapter 2 that I have categorised as Aristotle’s thorough analysis of recollection.<sup>196</sup> For 451b16 there is no reason why it should not be considered in relation to the theory of chapter 1.<sup>197</sup> In fact, the passage reads better this way than if it is taken as referring to recollection. Aristotle is explaining that some things or movements are easier to become accustomed to than others. And therefore, he says, some things are remembered already after the first seeing, while others must be seen several

<sup>192</sup> For examples, cf. Sorabji (2004<sup>2</sup>) 110; King (2004) 140.

<sup>193</sup> Sorabji (2004<sup>2</sup>) 110.

<sup>194</sup> *Mem.* 452b28–29.

<sup>195</sup> See the general sketch of the theory in the subsections “General Definitions of *μνημονεύειν* and *μνησθαι*” and “The Similarities and Differences Between *μνημονεύειν* and *μνησθαι*” above.

<sup>196</sup> These are the only two occurrences of *μνημονεύειν* that Annas (1992a) 298n4 includes in her list of “memory” words that refer to recollection. The remaining nine instances include one occurrence of *εὐμνημόνευτα* (452a3) and the rest are occurrences of *μνησθαι*.

<sup>197</sup> *Mem.* 451b14–16: *συμβαίνει δ’ ἐνίας ἅπαξ ἐθισθῆναι μᾶλλον ἢ ἑτέρας πολλάκις κινουμένων· διὸ ἐνια ἅπαξ ἰδόντες μᾶλλον μνημονεύομεν ἢ ἕτερα πολλάκις*. There are some textual difficulties in the passage (cf. my comment in the Textual Notes *ad* 451b14–16 below), but they do not affect my point.

times before one remembers them. This does not make good sense if Aristotle was talking about recollection, since “to be accustomed to” (ἐθισθῆναι) and “remember” (μνημονεύομεν) are parallel in the passage, and he even stresses the fact that they are causally linked by saying “for this reason” (διό), which, in the context, makes the “remember”-sentence dependent on the “to be accustomed to”-sentence. But if we have become accustomed to something, we do not recollect it but remember it, that is, the internal object is brought forth and remembered immediately. What we can become accustomed to, as regards the process of recollection, are *sequences* of movements or events that occur regularly in a particular order (which is not necessarily the natural order). However, the example of people seeing something just once proves that this is not what Aristotle has in mind.

The last occurrence is 452b5, and it is interesting for being the only passage of the *De memoria* in which the aorist μνημονεύσαι is used.<sup>198</sup> This should indicate a determinate event, and I would think that this is the occurrence of μνημονεύειν in the entire text that comes closest to signifying recollection. Still, there is no reason why the sentence cannot be interpreted as meaning, with an awkward English phrasing, “when we have to obtain the state of remembering a name”, thus fitting the definition given in chapter 1. On this interpretation, Aristotle is explaining how the process of recollection might go slightly wrong in a particular case in which one is trying to obtain the state of memory instead of being in a state of ignorance of the name. At any rate, this is the only passage where the translation “recollect” or “recall” for μνημονεύειν may be more tempting than “remember” (in Aristotelian terminology), and since it is not very difficult to construe μνημονεύσαι in accordance with the theory of chapter 1, this is, I believe, preferable.

Thus, every single instance of μνημονεύειν in the *De memoria* is unproblematically referred to the theory of chapter 1; this is not, however, the case with μεμνήσθαι which never refers to the definition of memory in the *De memoria* 1. I will now proceed to the examination of μεμνήσθαι.

First, it must be noticed that nine of the 15 occurrences are found in the part of the chapter concerned with a thorough analysis of the recollective process.<sup>199</sup> There are none in the first part that I distinguished, *viz.* the part concerned with conceptual distinctions. If this absence

<sup>198</sup> *Mem.* 452b4–5: ὅταν δέῃ ὄνομα μνημονεύσαι. The Latin medieval translations both have *reminisci*.

<sup>199</sup> *Mem.* 451b10–452b6.

could be said to indicate anything before the examination proper, it would be that whatever is referred to by *μεμνήσθαι* it does not constitute a completely separate and well-defined internal event, according to the Aristotelian theory. That is, of course, very speculative, but it fits the general sketch already provided. The remaining six occurrences are all found in the brief space of 452b27–453a3. I shall begin with these.

The passage has already been partly commented upon above in relation to *μνημονεύειν* and *τῇ μνήμῃ ἐνεργεῖν*, and since these six occurrences of *μεμνήσθαι* are not the most revealing, I shall treat them only briefly. Still, as was pointed out above, it is important that the first three of these occurrences belong in an example that is also described with the phrase *τῇ μνήμῃ ἐνεργεῖν*.<sup>200</sup> The last three occurrences are not very telling by themselves, but it must be noticed that they are linked with the preceding passage in the sense that they are used to describe different ways of cognising time in the process leading towards memory.<sup>201</sup> As we saw, the preceding passage stated that one must correlate the internal movements of object and time respectively. The present passage analyses different ways in which the movement of time can be applied. It should also be noted that *μέμνηται* is explained by the cognitive verbs *ἴσασιν* and *γνωρίζωσι*.<sup>202</sup> And furthermore, I would point out that the passage is generally concerned with the process leading to memory, not with memory itself. Thus, at the very least *μνημονεύειν* is not the verb we would expect, while *μεμνήσθαι* is understandable and the correct verb on the interpretation proposed above.

The remaining nine passages are the most significant for understanding what is signaled by *μεμνήσθαι*. The crucial passage is 452a10–12 which provides the definition of *μεμνήσθαι* that I used in the sketch above to establish the general meaning of the term:

τὸ γὰρ μεμνήσθαι ἔστι τὸ ἐνεῖναι δύναμιν τὴν κινουῦσαν τοῦτο δέ, ὥστ' ἐξ αὐτοῦ καὶ ὧν ἔχει κινήσεων κινήθηται, ὥσπερ εἴρηται.<sup>203</sup>

<sup>200</sup> *Mem.* 452b27, 28, 29.

<sup>201</sup> *Mem.* 452b30; 453a2, 3.

<sup>202</sup> *Mem.* 452b30–453a4: ὅτε μὲν γὰρ μέτρω οὐ μέμνηται αὐτόν, οἷον ὅτι τρίτην ἡμέραν ὁδῆποτε ἐποίησεν, ὅτε δὲ καὶ μέτρω· ἀλλὰ μέμνηται καὶ ἐὰν μὴ μέτρω· εἰώθασι δὲ λέγειν ὅτι μέμνηται μὲν, (τὸ) πότε μέντοι οὐκ ἴσασιν, ὅταν μὴ γνωρίζωσι τοῦτο [πότε] τὸ ποσὸν μέτρω.

<sup>203</sup> Hayduck (1877) 13 wanted to read ἔστι τῷ ἐνεῖναι, because he could not understand how the transmitted reading could be a description of remembering (Ross 1955: 246, claims wrongly, but interestingly, that Hayduck wanted ἔστι τῷ ἐνεῖναι.) Freudenthal (1869) 403 conjectured ἀναμνησκεισθαι ἔστι for μεμνήσθαι ἔστι, because “[e]ine



For to *memnēsthai* is the internal presence of a moving potential; and this, as has been stated, must be understood in the way that the person is moved by himself and by the movements he has.

This passage conclusively proves that *μηνῆσθαι* does not refer to remembering as defined in chapter 1, which is a conclusion that scholars will not, I think, dispute,<sup>204</sup> although, because of the erroneous view that *μνημονεύειν* and *μηνῆσθαι* are synonymous, some confusion regularly occurs.<sup>205</sup> To have in oneself “a moving potential” is to have a starting point that will lead the person to the desired object. In the context of 452a4–12, Aristotle is discussing recollection as different from relearning, and he simultaneously, but incidentally, illustrates the distinction between *ἀναμνησκεισθαι* and *μηνῆσθαι*: The former, he says, is the moving of oneself so as to proceed beyond one’s present state; that is, it is conceived of as a process. The latter, as we saw, is not itself a process but the having in one’s soul the means of moving to the desired object.

If this account is correct, it is not surprising that *μηνῆσθαι* plays an important role in recollection. Recollection is a process beginning from a state, working its way through a given number of intermediate states and ending in the state that one originally wanted to recollect (neither of which states, incidentally, can be categorised simply as “remembering” in the Aristotelian sense); the state from which one has the potential to move to the desired object is described using *μηνῆσθαι*; in principle this should be possible for all the intermediate states, if no obstacles are encountered in the process.

The account that I have just given is, I believe, substantiated by 452a12–26, in which passage Aristotle illustrates the process of recol-

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solche Ungenauigkeit aber wird man dem Ar. unmöglich da zutrauen dürfen, wo es gerade auf den Gegensatz zwischen *μηνῆσθαι* und *ἀναμνησκεισθαι* oder auf scharfe Begriffsbestimmung ankommt.”

<sup>204</sup> Already Michael of Ephesos, *In mem.* 28.32–29.1, explains *μηνῆσθαι* in this passage as meaning *ἀναμνησκεισθαι*, perhaps inspired by *Mem.* 451b8–10, but in the latter passage Aristotle explicitly refers to *ἀναμνησκεισθαι* not as the having of a point of departure, but as that *for which* one has the point of departure. See also the preceding note on the difficulty in interpreting *μηνῆσθαι* as Aristotelian remembering. The same interpretation occurs in the Latin tradition, cf. e.g. Albertus Magnus, *Liber de memoria*, ed. Jammy (1651), 60a: “Meminere [...] sive reminisci ...”.

<sup>205</sup> Cf. the comment on the passage by Sorabji (2004<sup>2</sup>) 104: “The remembering in question is the ability or tendency, not the act. It has earlier been called a state or affection (*hexis* or *pathos* 449b25; 451a23–24; a27–28). The affection has turned out to be a sort of imprinted image (450a27–b20). And now it appears that the state is the ability to stir up the image. Thus memory is both a state and an affection.”

lection.<sup>206</sup> This passage has been the subject of much dispute. I am convinced, however, that Sorabji's brilliant reconstruction of the text and his interpretation are both correct, but even if they are not, it does not affect the point I am making.<sup>207</sup> The passage shows how, in a given series (which Aristotle here, as often, illustrates using variables in the form of letters), one should move from one point in the series to another in trying to recollect. At every point in the series there are two possibilities: either one will be carried on towards the object that one wants to recollect, or one will be at a dead-end from where one can see no way to the desired object. In the first case, the person is said to *μεμνήσθαι*, in the second he is said not to *μεμνήσθαι*. The process as a whole is *ἀναμνησέσθαι*,<sup>208</sup> but a successful result is described as *μεμνήσθαι*. And surely it is no coincidence that the state one is in when something has successfully been recollected is not once in the passage described with the verb *ἀναμνησέσθαι* (or with *μνημονεύειν*) but six times with the verb *μεμνήσθαι*.<sup>209</sup> This state differs from memory in the way explained in 451a18–b10: what has been obtained is an internal object (image) that reflects the person's past experience with the object, but it is not the renewal of earlier memory,<sup>210</sup> nor is it simply remembering the object (in the Aristotelian sense of “remembering”), because memory, as stressed continuously throughout chapter 1 and also at the beginning of chapter 2, takes time. However, when one has brought forward the desired object, this object can become a memory image, but time is needed.

<sup>206</sup> *Mem.* 451b26 also exemplifies the result of a process of recollection, as can be seen from the preceding remarks on the process of recollection in 451b22–25.

<sup>207</sup> For thorough discussion including alternative suggestions, cf. King (2004) 124–129.

<sup>208</sup> Cf. *Mem.* 452a12–13.

<sup>209</sup> Interestingly, the medieval Latin translations in this passage prefer *reminisci* to describe the process, although *meminere* is also used.

<sup>210</sup> The Byzantine commentators, apparently ignoring *Mem.* 451a18–b10, thought that renewal of memory was the essential definition of recollection, cf. e.g. Michael of Ephesos, *In mem.* 18.32–19.2; Theodoros Metochites, *Paraphr. in mem.*, ed. Bloch (2005), 21. And this made them interpret recollection as “a sort of remembering”. This is a natural (perhaps even necessary) view if *μεμνήσθαι* is taken to mean “remember”, but it is a view that contradicts what Aristotle says in 451a18–b10. More surprisingly Ross (1955) 32 has a similar view. Sorabji (2004<sup>2</sup>) 41 says that “[a] successful recollective search culminates in remembering”, which is not completely true either; for some time must elapse before memory arises, and, in fact, it need not arise. However, the final goal of recollection certainly is memory, but it is not the immediate result. Cf. also *An.* 408b15–18.

All the passages in 452a12–26 are concerned with the final result of recollection, not with any intermediate points, but in principle the definition in 452a10–12 could also be applied to these intermediate stages. Of course, we do not actually want to recall any of the intermediate points; they are only aids in our search, and therefore the word *μεμνήσθαι* is more naturally used about the final starting point, that is, the one that brings us to the desired object. In fact, at least two passages might suggest that Aristotle would hesitate to use *μεμνήσθαι* of intermediate points. In 452a13–16 he describes a process of recollection using concrete terms, and here *μεμνήσθαι* is used only for the final result; for all the intermediate terms he talks about “going from X to Y”.<sup>211</sup> And second, in 451b25–26 Aristotle writes the following:

οὐδὲν δὲ δεῖ σκοπεῖν τὰ πόρρω, πῶς μεμνήμεθα, ἀλλὰ τὰ σύνεγγυς.

Now, we need not inquire how we recall that which is far apart in a series, but only how we recall that which is closely connected in the series.

That is, even when the desired object is at a great distance, the *μεμνήσθαι* is focused specifically on this object, ignoring the intermediate states, whatever their number.<sup>212</sup> Finally, and most importantly (although it is not explicit in the Aristotelian text): the inherent moving potential of a state of *μεμνήσθαι* is generally towards remembering, as is illustrated by the clarifying *τῇ μνήμῃ ἐνεργεῖν*. This is not true in the case of the intermediate points, which are merely there to be used in the process and then discarded. So, on all accounts it seems best to assume that intermediate points are not well-described by the term *μεμνήσθαι*.<sup>213</sup>

Whether or not, on Aristotle’s view, intermediate states in a process of recollection are describable by the verb *μεμνήσθαι*, it has now been shown that this verb involves something that is somewhat different from *μνημονεύειν*; and further, it is capable of being part of a process

<sup>211</sup> Cf. *Mem.* 452a14: ἀπ’ ἄλλου ἐπ’ ἄλλο ἔρχονται. Note, however, two peculiarities: (1) *μεμνήσθαι* here (if the text is sound) takes an object (in the genitive), while in the following passage it does not take an object, and, partly as a consequence, (2) attention is here focused exclusively on the state that one is in *after* having moved to the end point, while *μεμνήσθαι* in the following passage connotes the necessary movement from the starting point to the desired object.

<sup>212</sup> For a slightly different interpretation, cf. Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 122a.

<sup>213</sup> Although, as we shall see in the second essay, some thinkers, e.g. Albert the Great, did not make this distinction.

of recollection without thereby doing damage to the carefully argued Aristotelian theory of memory presented in the *De memoria* 1.

*Remarks on the Results*

This examination of terms has produced evidence that Aristotle's theory of memory is very different from the theories found in contemporary philosophy and psychology, and since no recent interpreters have acknowledged the difference of meaning between *μνημονεύειν* and *μνησθαι*, their general interpretations of Aristotle's theory of memory are, I believe, problematic. Of course, scholars are free to view Aristotle's theory in the lights of modern philosophy and psychology, using the established terminology, but, as it turns out, this is almost certain to distort the original theory. In the *De memoria* the former verb always refers to the Aristotelian kind of memory, the latter never does. Thus, the usual view on Aristotle's terminology concerning memory and recollection, as I described it above,<sup>214</sup> must be revised, and the terms categorised as follows:

1. Remembering: *μνήμη* (noun); *μνημονεύειν* (verb).
2. Recollecting: *ἀνάμνησις* (noun); *ἀναμνησέσθαι* (verb).
3. (Recalling:—(noun); *μνησθαι* (verb).)

Memory and recollection are two full-fledged subjects of investigations, and Aristotle has devoted a chapter to each in the *De memoria*. Recalling is neither a permanent state nor a faculty in the soul, which is the reason why I have placed it within parentheses. It is rather a descriptive tool that is used, among other things, to bridge the gap between the very different subjects of memory and recollection.

Based on the conclusions that have been drawn so far, both as regards the definition of memory and as regards the distinction between *μνημονεύειν* and *μνησθαι*, I will proceed to examine and criticise the two best-known scholarly interpretations of Aristotle's theory, namely those of Richard Sorabji and Julia Annas. In this way I will try to further demonstrate that an interpretation of Aristotle's theory that distinguishes between *μνημονεύειν* and *μνησθαι* is to be preferred as regards the consistency of his thought.

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<sup>214</sup> Cf. the subsection "Memory and Terminology" above.

*Richard Sorabji's View*

Richard Sorabji (2004<sup>2</sup>) acknowledges throughout his entire book that there is a clear conceptual distinction between memory and recollection to be found in the *De memoria*, but he still believes that two different kinds of memory can be distinguished: a dispositional memory and an acting memory.<sup>215</sup> Even though this division is not explicitly based on the assumption that *μνημονεύειν* and *μηνῆσθαι* are synonymous, it must still in some sense be derived from that idea. Without the passages from chapter 2 that describe acts using the verb *μηνῆσθαι*, and in particular the definition of *μηνῆσθαι* in 452a10–12, it is doubtful whether the concept of “act” would have been introduced with such confidence in interpretations of the Aristotelian theory of memory. On the distinction between disposition and act in memory, Sorabji says:<sup>216</sup>

Aristotle seems to think of the disposition mistakenly as an ability to perform acts of remembering. This in turn leads him to pay more attention to the act of remembering than to the ability, in accordance with the maxim that in order to analyse an ability, one must first analyse the corresponding activity (*DA.* 415a14–20).

Based on my interpretation of Aristotle's theory of memory and on the examination of the terms *μνημονεύειν* and *μηνῆσθαι*, I argue, contrary to this view, that Aristotle conceives of memory solely in terms of a state (*ἔξις* or *πάθος*): properly speaking, there are no memory acts.<sup>217</sup> Thus, I believe that Sorabji's distinction is not an Aristotelian one. And, as a consequence, even Sorabji's views on dispositional memory are different from Aristotle's.

Concerning dispositional memory, Sorabji says that it is the state (*ἔξις*) or affection (*πάθος*) that follows on perceiving, apprehending, experiencing, or learning,<sup>218</sup> and he refers the reader to 449b25, 451a23–24 and 451a27–28. He then makes a distinction between the state and the affection:<sup>219</sup> the “affection” (*πάθος*) is said to be an imprint in

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<sup>215</sup> Sorabji (2004<sup>2</sup>) 1. Sorabji makes it clear that these are only convenient descriptions and that a terminological distinction is not found in Aristotle, but it is equally clear that he believes such a distinction is *de facto* found in the *De memoria*.

<sup>216</sup> Sorabji (2004<sup>2</sup>) 2.

<sup>217</sup> Of course, one might argue that viewing an image is an act, but (1) it is in any case an act that is rather different from one proceeding from not-remembering to remembering; and (2) Aristotle's himself ends up defining this kind of viewing an image as a state (*ἔξις*).

<sup>218</sup> Sorabji (2004<sup>2</sup>) 1.

<sup>219</sup> Sorabji (2004<sup>2</sup>) 2, 104. See also Sorabji (1974/79) 46–47, 47n13.

the bodily organ, but “in addition to the affection” a “state” (ἔξις) is needed, *viz.* the state that provides “the ability to excite the quasi-imprint and the corresponding mental image”. This, Sorabji says, is dispositional memory, and since Aristotle, according to him, pays more attention to acts of remembering, Sorabji immediately moves on to these. So, less than one page of Sorabji’s introduction is concerned with dispositional memory; the rest of the introductory remarks on memory are concerned with the parts of remembering that he considers “acts”.

First, and fundamentally, I find Sorabji’s basic distinction between ἔξις and πάθος problematic. I have already argued above that these two terms are used interchangeably.<sup>220</sup> Sorabji adduces a number of passages to show that πάθος is used of the memory imprint in the person or animal,<sup>221</sup> but his examples merely illustrate the wide range of the term that has often bothered translators of Aristotle’s writings in natural philosophy.<sup>222</sup> Thus, in several passages, including the introductory lines of the *De memoria*,<sup>223</sup> the term is used unambiguously to indicate “memory”, not just the physical imprint.<sup>224</sup> To give just one example, Aristotle says in one of the passages: “But when the state of having or the affection is produced in the person, then it is memory.”<sup>225</sup> Sorabji seems to have been much influenced by a number of passages from the ethical works in which Aristotle does make this kind of distinction between ἔξις and πάθος.<sup>226</sup> However, I find no trace of this discussion in the *De memoria*. Furthermore, it seems to me that the terms do not carry completely the same meaning in these ethical discussions as they do in the *De memoria*, but signify rather “(uncontrolled, one-sided) love” (πάθος) and “(deliberate, mutual) love” (ἔξις).<sup>227</sup>

<sup>220</sup> See the subsection “Aristotle’s Definition of Memory” above.

<sup>221</sup> Sorabji (2004<sup>2</sup>) 2.

<sup>222</sup> For a particularly clear example of a completely different use of πάθος in the text, cf. *Mem.* 450b1: διὸ καὶ τοῖς μὲν ἐν κινήσει πολλὴ διὰ πάθος ἢ δι’ ἡλικίαν οὓσιν οὐ γίγνεται μνήμη ... = “This is also the reason why those who are in much movement because of an affection or because of age do not remember ...”.

<sup>223</sup> *Mem.* 449b5. Cf. also 451a23–24; 451a27–29, where ἔξις is also mentioned as an alternative.

<sup>224</sup> Sorabji (2004<sup>2</sup>) 1–2 (“Aristotle’s account of the disposition is that it is a *state* or *affection* [...], that follows on perceiving, apprehending, experiencing, or learning [...]. It does not count as memory, until a little interval has elapsed.”) almost seems to concede this point, but he immediately recants.

<sup>225</sup> *Mem.* 451a23–24: ὅταν δ’ ἐγγένηται ἡ ἔξις ἢ τὸ πάθος, τότε μνήμη ἐστίν.

<sup>226</sup> *EN.* 1105b19–28; 1128b14–15; 1157b28–32; *EE.* 1220b12–20.

<sup>227</sup> Cf. in particular *EN.* 1157b28–31: εἶκοι δ’ ἡ μὲν φίλησις πάθει, ἡ δὲ φιλία ἔξειν ἡ γὰρ φίλησις οὐχ ἤττον πρὸς τὰ ἀψυχὰ ἐστίν, ἀντιφιλοῦσι δὲ μετὰ προαιρέσεως, ἡ δὲ

Second, and equally importantly, there is the definition of dispositional memory as “the ability to excite the quasi-imprint and the corresponding mental image” cited above. On Sorabji’s interpretation, this refers only to a definition of the ἔξις involved in memory; on my interpretation it would refer to both ἔξις and πάθος. I do not, however, believe that this is the right interpretation of ἔξις (and πάθος). As regards this crucial part of the definition, Sorabji refers to 452a10–12,<sup>228</sup> a passage that has been examined above. But, in my opinion, this involves one mistake and one very doubtful move. The mistake is taking μὲμνησθαι to mean “remember” in the Aristotelian sense, which makes the passage contradict the essential definition of memory presented in chapter 1. For the “remembering” of chapter 1 is a state that does not refer to any processes that will follow the present state. It simply refers to the state of having present an internal image that represents a past experience. And in fact, there is no reason why one should see 452a10–12 as the definition of dispositional memory, because Aristotle does not in this passage use ἔξις at all, and the passage is concerned with recollection. Thus, the doubtful move is Sorabji’s connecting μὲμνησθαι in this passage with ἔξις, even though ἔξις is not mentioned. The question of the relevance of this move may be ignored, however, if it is agreed that μὲμνησθαι is *not* remembering in the Aristotelian sense. In addition to these difficulties, Sorabji must also deal with the fact that both the initial attempt at a definition and the final definition describe memory in terms of a state, that is, the part of memory which Sorabji terms “dispositional”, and which he claims is not of much interest to Aristotle.<sup>229</sup>

This, I believe, undermines the foundation of Sorabji’s view on Aristotle’s dispositional memory, but then another interpretation of the ἔξις/πάθος theory of memory presented in *De memoria* 1 is needed. This alternative I have tried to sketch in the preceding sections of this essay.

If it is accepted that Aristotle holds a rather limited theory of memory as a state in the remembering subject, memory acts are strictly speaking eliminated, and thus the section of Sorabji’s introduction con-

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προαίρεσις ἀφ’ ἑξέως = “Now, love seems to be a *pathos*, friendship a *hexis*; for love may be felt no less towards lifeless things, whereas mutual friendship involves choice, and choice originates from a *hexis*.” Sorabji (1974/79) 58–59 apparently views *hexis* simply as a “long-term state”.

<sup>228</sup> Sorabji (2004<sup>2</sup>) 2, 104.

<sup>229</sup> *Mem.* 449b24–25; 451a14–16.

cerned with memory acts must be regarded as at least partly distorting the theory.<sup>230</sup> The elimination of memory acts is, in my opinion, a welcome consequence. If in fact Aristotle held such a theory, he would be guilty of a large number of mistakes and confusions, and indeed Sorabji does blame Aristotle on this account. However, if the Aristotelian theory does not include memory acts, some of the criticism will not apply.

One of Sorabji's main criticisms concerns mental (or internal) images in remembering. Sorabji holds, correctly I believe, that images (*φαντάσματα*) are pictorial according to Aristotle,<sup>231</sup> but Aristotle makes the additional claim that one cannot remember without an image being present in the soul.<sup>232</sup> Mental imagery is still a disputed topic in contemporary philosophy of mind, and Sorabji draws on modern research and philosophical writings when arguing that not all memory needs images.<sup>233</sup> Even when images *are* employed in remembering, they need not be likenesses of the remembered object, Sorabji says. Attempting to refute Aristotle, Sorabji mentions remembering a particular man by having an image of his moustache (= something existing in association with the remembered object), remembering an Indian by having an image of an elephant (= something that is thought of in association with the remembered object), and remembering a man named Smith by having an image of an anvil (= something that has some sort of likeness with the remembered object and which is therefore made to represent it).<sup>234</sup> Such cases of remembering were not discussed by Aristotle in his theory of memory, Sorabji says, even though "we might have expected him to deal with this kind of symbolisation".<sup>235</sup> Sorabji seems willing to attribute to Aristotle a theory in which two images are really involved, and where we immediately pass on from the image of the moustache to the image of the man, but he objects on philosophical grounds "that the copy of the man himself can be bypassed, and that the copy of the moustache is sufficient."<sup>236</sup>

<sup>230</sup> Sorabji (2004<sup>2</sup>) 2–21.

<sup>231</sup> On the nature of *φαντάσματα* and the scholarly debate, cf. the section "Aristotle on Memory" (subsection "Images") above.

<sup>232</sup> *Mem.* 450a12–13.

<sup>233</sup> In particular, Sorabji has used Martin & Deutscher (1966) and Malcolm (1970). As regards Malcolm, the later and much more elaborate Malcolm (1977) should be noted. For just a fraction of the relevant studies of mental imagery, cf. e.g. Tye (1991) and the essays in Block (1981a), Block (1981b), Stich & Warfield (1994) and Sigel (1999).

<sup>234</sup> Sorabji (2004<sup>2</sup>) 3–4.

<sup>235</sup> Sorabji (2004<sup>2</sup>) 3.

<sup>236</sup> Sorabji (2004<sup>2</sup>) 4.



The kind of remembering that Sorabji is here describing is clearly an active process.<sup>237</sup> Whether or not one agrees with Sorabji and others that an image of the man is not needed to remember the man (and Aristotle certainly would not agree),<sup>238</sup> one must be able to connect “moustache” and “man”, and I find it difficult to see how this can be done without somehow deducing the relationship, or, as in the case of “Smith” and “anvil”, without having formerly connected the images using the mind. That is, there is no inherent natural, logical or habitual relationship between the two terms that enables transition from one to the other without some prior and/or posterior mental activity. But if this is so, Aristotle simply would not call this “remembering”: he would call it “recollection”. And as a matter of fact, Aristotle does describe precisely this kind of process in 452a12–16, but it is described as a process of recollection.<sup>239</sup> Remembering is having an image that represents exactly what is remembered; that is, if one remembers a man, one possesses an image of that man. This simply is the definition of memory, according to Aristotle. Having an image of an elephant can never be the equivalent of remembering an Indian, since “Indian” is not an inherent part of the concept “elephant”. The major difficulty that this kind of interpretation (that is, the elimination of active memory) has had to face until now is that the process described in 452a12–16 ends by stating that the person ἐμνήσθη the desired object. But since it has been shown above that this does not mean that he remembers, but rather that he has recalled (in Aristotelian terminology), it is no longer a problem.

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<sup>237</sup> On this conception of remembering, cf. also Sorabji (2004<sup>2</sup>) 8: “[T]he present state [in remembering] may consist in any of a great variety of things. It may involve an image. But it may involve simply thinking over, or recounting, or re-enacting a childhood scene without imagery. It may involve merely finding something familiar when one sees it, or feeding the cat, when one remembers to feed the cat, or striding over a missing step in the dark, when one remembers the missing step.” But these could never be Aristotelian examples of remembering.

<sup>238</sup> It has been pointed out to me that Aristotle may be more open-minded about this than I allow. After all, he believes that one can use an image of a triangle to think of something which altogether lacks extension, and presumably this would carry over to the case of remembering objects of thought. This may be so, but Aristotle explicitly says that we only remember these accidentally, because the object that we remember essentially is the (perceptible) content of the image.

<sup>239</sup> Sorabji (2004<sup>2</sup>) 4 says that “[b]orrowing from this account” of recollection from *Mem.* 2 one may also provide a theory of active memory, but I fail to see how the description in 452a12–16 differs from Sorabji’s examples of remembering.

So, if I were to try to answer Sorabji's question:<sup>240</sup> "[H]ow would Aristotle deal with images resembling a moustache, an elephant, or an anvil, when these represent a man?", I would say that this is simply not remembering but a process of recollection, according to Aristotle. And, even more importantly, an answer to the question:<sup>241</sup> "[W]hy does Aristotle postulate an image as involved in remembering?", is also provided, namely that having an image is simply part of the internal state that Aristotle calls "remembering", which is a much more narrow state than present-day "memory".

The problem that I have now discussed is, I think, the most basic one. There are, however, other details in Sorabji's interpretation of Aristotle's theories in relation to which the conception of remembering as a state, not an act, would be very useful. To provide one more example,<sup>242</sup> Sorabji says that even though Aristotle does not make an explicit conceptual distinction between "remembering" and "relearning" (as he does between "recollection" and "relearning" in 451b6–10 and 452a4–12), he does supply "plenty of materials for an answer",<sup>243</sup> and proceeds to explain the difference as one of relearning lacking the causal link that is found in memory between the imprint and the object. Indeed, on the view that memory acts exist, I agree that a conceptual distinction was certainly to be expected in the passage 451a18–b10 dealing with such matters, since remembering, recollection and relearning would then be parallel active processes. But they are not. Memory is a state in the primary organ of sense, while both recollection and relearning are active processes of the mind. Nobody would confuse remembering and relearning on the Aristotelian theory of chapter 1, and therefore no conceptual distinction is needed.

Properly speaking, Sorabji's book is both an interpretation of Aristotle's theories of memory and recollection and a philosophical critique.<sup>244</sup> But Sorabji does not believe that Aristotle's basic views on memory are very different from ours, and this often forces him to take the view that

<sup>240</sup> Sorabji (2004<sup>2</sup>) 4.

<sup>241</sup> See Sorabji (2004<sup>2</sup>) 5–8.

<sup>242</sup> In addition to the following, I believe that there are similar problems with Sorabji's criticism (2004<sup>2</sup>: 13–14) of Aristotle's idea that memory is always of the past. On a present-day conception of memory I am, however, convinced that Sorabji is right.

<sup>243</sup> Sorabji (2004<sup>2</sup>) 12–13.

<sup>244</sup> I note that R.G. Tanner (1973) in a review of the book criticised Sorabji for mixing interpretation and philosophical criticism.

Aristotle is guilty of oversights and self-contradictions. In conclusion, I believe that there are certain problems connected with Sorabji's views on Aristotle's theory of memory, and that the most important cause of these problems is that he does not distinguish between *μνημονεύειν* and *μεμνήσθαι*.

### *Julia Annas' View*

In her interpretation of Aristotle's *De memoria* Julia Annas argues that not only must "memory" as defined in chapter 1 and "recollection" as defined in chapter 2 be seen as two forms of memory from a present-day point of view: they were also so regarded by Aristotle himself. This has forced Annas to put great emphasis on the "memory" words in the second chapter of the text, and therefore her interpretation is, I believe, vulnerable to the arguments of this essay.

Annas argues that for Aristotle *μνήμη* is personal memory, while *ἀνάμνησις* is non-personal memory. Personal and non-personal memory are defined by Annas as follows:<sup>245</sup> personal memory is when the remembering subject not only remembers X ("I remember the red house") or remembers that X ("I remember that the red house is rather large"), but also remembers *experiencing* X ("I remember my seeing the red house") or *experiencing* that X ("I remember that I considered the red house rather large"). In non-personal memory it is not necessary to remember the experience but only the fact.

The main argument of Annas' very interesting article is that Aristotle's theory should not be taken as "a narrow theory of memory which ties all memory to the having of images".<sup>246</sup> In her opinion, Aristotle has himself seen that there are at least two different kinds of memory, and these he treats in the *De memoria*: personal memory (*μνήμη* proper) in chapter 1, non-personal memory (*ἀνάμνησις*) in chapter 2. Contrary to this theory, I have argued that memory is indeed a very narrow internal state, according to the Aristotelian definition, and I will argue further that if the distinction between the verbs *μνημονεύειν* and *μεμνήσθαι* is accepted, it creates substantial difficulties for Annas' view.

Initially, it must be noticed that Annas implicitly concedes that a narrow theory of memory is indeed what one will think that Aristotle

<sup>245</sup> Annas (1992a) 299–300.

<sup>246</sup> Annas (1992a) 311.

advances in the *De memoria*.<sup>247</sup> Furthermore, she says, though without any references, that the *De memoria* is usually seen as concerned with memory but as also treating the loosely related phenomenon of recollection.<sup>248</sup>

However, Annas' main arguments in favour of her interpretation are based on the character of *De memoria* 2. She argues that even in chapter 2 some discussions are related only to memory, but more significantly, in her opinion, is the fact that "memory has invaded even the official account of recollection".<sup>249</sup> Thus, she concludes that for Aristotle there is a very broad acceptable usage of "memory" that covers both the kind of memory defined in chapter 1 and the recollection defined in chapter 2. This is the basis of Annas' view.

The foundation of the second argument (which Annas considers the most important) has already been refuted above. "Memory" has not invaded the official account of recollection, since *μνησθαι* does not mean "remember", according to the definition of chapter 1, and the few occurrences of *μνημονεύειν* in the relevant parts of chapter 2 refer to the theory put forward in chapter 1. As regards Annas' first point, I have argued that Aristotle does not, in fact, substantially reintroduce the subject of memory until the end of chapter 2, that is, not until he has defined recollection. So, I disagree with this part of Annas' theory, but even if one accepts it, it would not be unnatural that Aristotle did reintroduce memory, since there are certain remarkable likenesses between the two capabilities. After all, that is what justifies the inclusion of both of them in a single treatise. Most importantly, of course, they both deal with past events,<sup>250</sup> and the importance of recollection in Plato's epistemology will also have been an important factor. The differences are, however, more significant than the likenesses. As already mentioned, memory and recollection belong to different faculties of the soul, *viz.* memory to the sensing soul and recollection to the rational soul, and Aristotle himself considers this of prime importance.<sup>251</sup> Thus, memory is a state over which one has little or no control,<sup>252</sup> while recol-

<sup>247</sup> Cf. Annas (1992a) 311.

<sup>248</sup> Annas (1992a) 297–298.

<sup>249</sup> Annas (1992a) 298.

<sup>250</sup> Cf. *Mem.* 449b15; 449b27–28 (memory); 451a5–7; 453a10–14 (recollection). I do not understand Annas' rejection (1992a: 308) of the latter passage on recollection.

<sup>251</sup> *Mem.* 453a4–14.

<sup>252</sup> That there are some possibilities of control is indicated by *Mem.* 451a12–14.

lection is an active process of thought that may not always provide the desired result, but still one has extensive control over what is done.<sup>253</sup>

It seems therefore that there are substantial difficulties confronting the foundation of Annas' view.<sup>254</sup> Of course, her analysis is still interesting from the point of view of contemporary philosophy of mind, but it does not seem to be in complete accordance with Aristotle's thoughts on memory and recollection. And since Annas is even willing to admit that Aristotle's distinction (in particular, as regards non-personal memory and ἀνάμνησις) is not completely like anything in modern philosophy,<sup>255</sup> it is still uncertain to what extent it is useful to us.

### *General Conclusion*

In the preceding part of this essay I have tried to interpret the Aristotelian theory on its own premisses and also criticised existing interpretations of the theory. It is now a reasonable question to ask why the theory has been so misinterpreted, according to my interpretation.<sup>256</sup> Memory (or rather: μνήμη) is analysed and defined relatively clearly in *De memoria* 1, and the theory that can be extracted from this chapter is not, I believe, like the theories that e.g. Sorabji and Annas present. There are probably two interrelated explanations.

First, and most generally, scholars are often unwilling to attribute a theory to Aristotle, if it cannot be usefully employed, or at least understood, in contemporary philosophy.<sup>257</sup> Aristotle's theory of memory is not sufficient from the point of view of modern philosophy and science, and in several respects it is a puzzling view because of the narrowness of the concepts it defines. But if recollection, or at least what is said about μεμνήσθαι in *De memoria* 2, could be included in his theory and still under the heading of "memory", then the Aristotelian theory is

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<sup>253</sup> For some limitations of recollection imposed by bodily features, cf. *Mem.* 453a14–31.

<sup>254</sup> Annas' theory is supported, albeit without further argument, by Caston (1998) 258n18 and Carruthers & Ziolkowski (2002) 7n4.

<sup>255</sup> Annas (1992a) 309.

<sup>256</sup> Apart from the reasons that I present here, there also seem to be some significant historical reasons. These will be treated in the second essay below.

<sup>257</sup> The current debate about Aristotle's theory of perception (αἴσθησις) and, more broadly, about his entire philosophy of mind is an elaborate example of this. For some of the literature, cf. Burnyeat (1992); Nussbaum & Putnam (1992); Broadie (1993); Everson (1997); Johansen (1998); Sorabji (2001); Burnyeat (2002).

much closer to modern theories of memory. This is not, however, an option, as regards the definition given in chapter 1, and the reason for this provides the second explanation why scholars have often misinterpreted the *De memoria*: It has been possible to include the relevant parts of *De memoria* 2, because *μνημονεύειν* and *μηνῆσθαι* were regarded as referring basically to the same phenomenon, but, as I have tried to show, they do not, and thus the conclusion must be that Aristotelian thoughts on these matters are very different from modern thought.

Finally, a few words must be said in defense of Aristotle. The Aristotelian theory of memory is a very limited theory from the point of view of contemporary philosophy and psychology, but modern scholarship has to keep one very important thing in mind when interpreting Aristotle: We are not really interpreting a capability that is named “memory”, but one that is called *μνήμη*. It is Aristotle’s task, not ours, to define it, and it is our task to understand the definition of *μνήμη*, to examine why he defines it as he does, and see whether or not it can profitably be used by us. In the case of memory, I am convinced that there is no one-to-one correspondence between his views and our views, and thus I am less optimistic than Sorabji, Annas and other recent interpreters of the *De memoria*.

But this does not mean that Aristotle’s investigations are completely irrelevant to us. In particular, one might proceed by asking why Aristotle would want to define memory as such a narrow state. After all, the usual Greek concept of *μνήμη* was considerably broader. And at least one of the explanations is that memory conceived as broadly as present-day theories of memory do might seem muddled and ill-categorised. There are simply too many completely different cognitive (and sensitive) states and acts involved for it to be philosophically useful, or so it might be argued. Some philosophers and scientists would argue that the very fact that memory is a complicated concept proves that it should not (or cannot) really be *defined*, or at least not before having obtained a more secure foundation.<sup>258</sup> Aristotle will move in the opposite direction: We must focus attention on the elements in memory that are most essential or basic, and base our theory of memory on this foundation. All elements that conflict with this foundation will be excluded from the essential definition of memory, even though they

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<sup>258</sup> For instance, Malcolm (1977). Crick (1994) 20 considers this no-definition-procedure the right one as regards consciousness generally, and he would therefore agree, I suppose, that it applies also to memory.

may, on a common-sense view, seem to be closely related to, or even a kind of, memory. The basic features that Aristotle identified were three:

1. Memory is always of the past, never of the present or of the future.
2. Memory belongs to several known animals.
3. Memory belongs to the sensing faculty.

No. 1 might seem obvious, but, as I have already mentioned, Malcolm (1977) objected strongly to Aristotle's theory on the grounds that we also remember present and even future events. Aristotle would fault Malcolm on several grounds, but his basic argument against Malcolm's examples would be: "These simply cannot be instances of memory, *because* they are not of the past." That is, they are contrary to a basic feature of *μνήμη* as defined by Aristotle. Still, Malcolm does not hold the majority view on this issue, and I suppose that most people would intuitively agree with Aristotle that what we remember is something of the past.<sup>259</sup>

No. 2 was equally obvious to Aristotle, but as we shall see,<sup>260</sup> modern science has yet to reach agreement on this issue.

No. 3 is, however, the crucial element as regards the way we see Aristotle's theory. Memory is not sensation (*αἰσθησις*), but in a way one does sense (*αἰσθάνεσθαι*) something when remembering, *viz.* an image representing something of the past. And furthermore, all images are originally derived from perception. Thus, Aristotle does not doubt that memory belongs to the sensing faculty; in fact, no. 2 requires that it is so, and an account of memory must be in accordance with the attribution of memory to the sensitive soul. But, as already indicated, this generates problems as regards thought and the objects of thought. Not only do we remember objects of thought, but Aristotle also has to handle cases where a person *decides* to (try to) remember and then goes about doing it. For this process seems to prove a close relationship between memory and thought, one that is not possible if memory belongs essentially to the sensing soul. Aristotle was aware of this problem, but solved it by definition: Memory does belong to the sensing capacity, and when thought initiates a process, it is not remembering but recollecting that the person is involved in. Still, objects of thought posed a special problem, since remembering these and remembering perceptual items both

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<sup>259</sup> Cf. Tulving & Craik (2000) v (preface) cited above in the section "Memory and Recollection: The Differences" (subsection "Conceptual Issues").

<sup>260</sup> See Appendix 2 to this essay.

involve approximately the same kind of states. And therefore, Aristotle agrees that one can remember objects of thought, but only accidentally as something following upon having images. All this has forced Aristotle to a rather limited, but—he would probably say—a clear theory of memory. Recollection is then used to comprise some of the elements that many interpreters have found missing in Aristotle's theory of memory.

Aristotle's *De memoria* is, I believe, a perfect example to illustrate his procedure and philosophical wishes in general. He insists that categories must be established and delineations must be made within a topic in order that we may proceed on a clear and well-defined foundation. As stressed by Annas and King, Aristotle is in this respect close to a modern psychological method of investigation.<sup>261</sup> But it must also be noticed that once he has established his well-defined categories, he generally focuses his attention on the conceptual issues involved. And having defined the object of his investigation, he surveys the field to determine what to do with elements that might otherwise have been seen as belonging to the object that has been defined, but which did not find a place in the definition. This procedure is very clearly exemplified in the treatment of memory and recollection. I think it is fair to say that, even though present-day conceptions are very different from the Aristotelian ones, and even though his conceptual tools were severely limited compared to ours, Aristotle embodies some of what is best in both psychology and philosophy of mind as regards methods.<sup>262</sup>

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<sup>261</sup> Annas (1992a) 297; King (2004) 30.

<sup>262</sup> Despite the argument that I have presented in favour of a narrow interpretation of Aristotle's theory of memory, I should perhaps point out that much depends on one's conception of "Aristotelian definition". In particular, it might be interesting to view the definition of memory in 451a14–16, not as final, but as the starting point for subdivisions, in accordance with some remarks in the *Analytica posteriora* (e.g. II.7–10, 13–14). In this way one might, perhaps, arrive at a definition which is closer to modern conceptions of memory. However, no subdivisions of such a kind are found in the *De memoria*, and any attempt to establish a broader, Aristotelian theory must, I think, depart from an extensive analysis of Aristotle's difficult discussions and scattered remarks about definition found in the *Analytica posteriora*. Such an analysis goes far beyond the limits of this essay.



*Appendix 1: “Memory” Words in the Rest of the Corpus Aristotelicum*

The Aristotelian writings, as is well-known, present conflicting (or at least apparently conflicting) views on several philosophical issues. This is also true concerning memory. Thus, in a passage of the *Topics*, Aristotle says:<sup>263</sup>

πάλιν εἰ τὴν ἕξιν εἰς τὴν ἐνέργειαν ἔθηκεν ἢ τὴν ἐνέργειαν εἰς τὴν ἕξιν, οἷον τὴν αἴσθησιν κίνησιν διὰ σώματος· ἢ μὲν γὰρ αἴσθησις ἕξις, ἢ δὲ κίνησις ἐνέργεια. ὁμοίως δὲ καὶ εἰ τὴν μνήμην ἕξιν καθεκτικὴν ὑπολήψεως εἶπεν· οὐδεμία γὰρ μνήμη ἕξις, ἀλλὰ μᾶλλον ἐνέργεια.

Again, if he [*scil.* a dialectical opponent] has placed “state of having” under “activity” or “activity” under “state of having”, by, for instance, calling sensation a movement through the body, [then you should object]; for sensation is a state of having, while movement is an activity. And the same applies also if he has said that memory is a state of having that retains a conception; for no memory is a state of having but rather an activity.

This blatantly contradicts *De memoria* 1, in which memory is explicitly said to be “a state of having”. However, it seems obvious that the work devoted to memory must be regarded as Aristotle’s considered view on the issue, and in light of the developmental theories proposed by scholars, not to mention the dialectical content of the passage from the *Topics*, this contradiction does not pose a real threat to an interpretation of Aristotle’s theory of memory.<sup>264</sup> There is, however, another charge that might be brought against my reconstruction, *viz.* that the reconstruction could be difficult to apply to the use of μνήμη, μνημονεύειν and μεμνησθαι in Aristotle’s other writings. Therefore, I shall take a relatively brief look at the use of these words in the rest of the *Corpus Aristotelicum*.<sup>265</sup>

First, it is only reasonable to point out what Aristotle is trying to do in the *De memoria*. As stressed in particular by Annas,<sup>266</sup> one of Aristotle’s primary interests in this text is to delineate memory and recollection as clearly as possible. It must be expected that such precise delineation will

<sup>263</sup> *Top.* 125b15–19.

<sup>264</sup> But see King (2004) 39 with his note 64, who claims, on the basis of this passage from the *Topics*, that memory is not merely passive but primarily an active capability. However, he does acknowledge that the passage is part of a dialectical argument and not necessarily Aristotle’s own view.

<sup>265</sup> I have examined the entire *Corpus Aristotelicum*, but I will only describe the most important works and occurrences of the relevant terms.

<sup>266</sup> Annas (1992a).

result in ideas that are not necessarily identical to the ones that he and other Greeks employ when they are not reflecting on the subtle distinctions. This kind of procedure is well-known to most people, I suppose, and it is also found elsewhere in the Aristotelian writings as regards other subjects. Movement (κίνησις) is a case in point. Throughout the writings on natural philosophy Aristotle regularly uses movement for all kinds of change, but when he is looking more carefully into the definition of movement,<sup>267</sup> he denies that coming-to-be (γένεσις), that is, substantial change, can properly speaking be called movement, since that which is not cannot be said to be in motion. The correct, broad term is “change” (μεταβολή). Something similar is true for the term πολιτεία. So, even if Aristotle’s use of μνημονεύειν and μεμνήσθαι is more relaxed in other works, it does not seriously damage the argument presented above. We cannot really hope to find such sharp distinctions in ordinary language. However, it will be seen that problematic passages are rare and confined to only a few of the Aristotelian texts, and I believe that the most relevant writings support the definitions that I have proposed.

### *The Psychological Works*

The *De anima* does not treat memory. It contains very few references to remembering, and they are all used to illustrate a point concerning some other internal faculty.<sup>268</sup> Only μνημονεύειν, not μεμνήσθαι, is used, but the occurrences are too few and uninformative to be really helpful. Still, it is to be noted that μνημονεύειν is categorised among the affections (πάθη) which do not belong to the thinking capacity.

The occurrences in the *Parva naturalia* (not including those found in the *De memoria*) do not conclusively reveal a distinction equal to the one that I have made above, but still an interesting conclusion can be drawn: When Aristotle refers to remembering, he always uses

<sup>267</sup> *Phys.* V.1; *Metaph.* 1067b14–1068a7.

<sup>268</sup> *An.* 408b24–29: καὶ τὸ νοεῖν δὴ καὶ τὸ θεωρεῖν μαραίνεται ἄλλου τινὸς ἔσω φθειρομένου, αὐτὸ δὲ ἀπαθές ἐστιν. τὸ δὲ διανοεῖσθαι καὶ φιλεῖν ἢ μισεῖν οὐκ ἔστιν ἐκείνου πάθη, ἀλλὰ τοῦδὲ τοῦ ἔχοντος ἐκείνου, ἢ ἐκείνου ἔχει. διὸ καὶ τούτου φθειρομένου οὔτε μνημονεύει οὔτε φιλεῖ· οὐ γὰρ ἐκείνου ἦν, ἀλλὰ τοῦ κοινού, ὃ ἀπόλωλεν· ὃ δὲ νοῦς ἴσως θεϊότερόν τι καὶ ἀπαθές ἐστιν; 427b18–20: πρὸ ὁμμάτων γὰρ ἔστι τι ποιήσασθαι, ὥσπερ οἱ ἐν τοῖς μνημονικοῖς τιθέμενοι καὶ εἰδωλοποιοῦντες; 430a22–25: χωρισθεὶς δ’ ἐστὶ μόνον τοῦθ’ ὅπερ ἐστὶ, καὶ τοῦτο μόνον ἀθάνατον καὶ αἰδῖον (οὐ μνημονεύομεν δέ, ὅτι τοῦτο μὲν ἀπαθές, ὃ δὲ παθητικὸς νοῦς φθαρτός)· καὶ ἄνευ τούτου οὐθὲν νοεῖ.

μνημονεύειν as the verbal form, never μεμνησθαι; although memory is not the subject of any of the other works, which makes it uncertain whether or not memory is conceived narrowly or as a broad term, there are some useful references.<sup>269</sup> The passages from the *De insomniis* are particularly interesting, offering both confirmation of and (apparent) difficulties for my view. In both passages, we find the phrase πειρᾶσθαι μνημονεύειν, illustrating that μνημονεύειν on its own cannot cover this process. Thus, the phrase is most likely to mean “trying to obtain the state of having a memory image”, and it is therefore more like a kind of recollective (or recalling) process. A difficulty does, however, seem to arise. In both examples the phrase is coupled with the expression τὸν νοῦν προσέχειν (literally “set one’s mind to”),<sup>270</sup> and this might seem to pair memory with some sort of thinking act. But this is not a real difficulty. First of all, the phrase τὸν νοῦν προσέχειν is a standard expression indicating that the subject pays attention to something; it is not at all certain that Aristotle reflected on the fact that it contains the word νοῦς. But even if Aristotle was well aware that he was using the term, the process involving πειρᾶσθαι μνημονεύειν is, as already said, *not* remembering but rather a recollective or recalling process, and such processes can be coupled with mind without bringing about conceptual difficulties.

As regards μεμνησθαι, there are only two occurrences in the *Parva naturalia* outside the *De memoria*, both found in a passage from the *De divinatione per somnum*, and they signify “mention” or, to keep the connection with memory, “remind (us)” on both occasions.<sup>271</sup>

Thus, I believe that the other texts of the *Parva naturalia*, which are of course the texts that are most closely related to the *De memoria*, support the conclusions that I have reached concerning the definition of memory in the *De memoria*. The *De anima* might also be slightly in favour of my interpretation.

<sup>269</sup> *Somn.* 453b17–20; 456a27–29; *Insomn.* 458b18–20; 462a8–11.

<sup>270</sup> In *Insomn.* 462a8–11 τὸν νοῦν is omitted, but it is clearly implicit.

<sup>271</sup> *Div. somn.* 463b3–9. In Beare’s revised translation in Barnes (1984, vol. 1) 737 the first occurrence is translated by “mentioning” and the second by “remembering”, but this does not seem to make sense, and it is difficult to defend this shift in meaning. In the original Oxford-translation (ed. W.D. Ross 1908) Beare used “mentioning” on both occasions.

### *The Biological Works*

Second only to the *Parva naturalia* in relevance are (at least *a priori*) the Aristotelian biological writings.

First, the *De motu animalium* commands attention because it has very tight bonds with the *Parva naturalia*, but there are no occurrences of the two relevant verbs in this text.<sup>272</sup>

The *Historia animalium* is interesting, since this work repeats the clear-cut distinction between memory and recollection brought forward in the *De memoria*.<sup>273</sup> But the occurrences of the relevant terms are few and uncertain, thus making it impossible to form general conclusions. Still, the pattern is the same as in the *Parva naturalia*. There is only one occurrence of *μνημονεύειν*,<sup>274</sup> found in a passage which states that children dream at an early age, but it is only later that they [*scil.* τὰ παῖδιά] *μνημονεύει* ... τὰς φαντασίας. (The occurrences of *μνήμη* and *μνημονικός* are not revealing for my purpose.)<sup>275</sup> The three occurrences of *μεμνήσθαι* are all clear and unambiguous instances of “mention”.<sup>276</sup> I have found only a single “memory” word in the *De partibus animalium*,<sup>277</sup> and it is used to signify “make mention of” or “direct attention to”. There are no relevant occurrences in the *De incessu animalium* or in the *De generatione animalium*.

### *The Logical and Metaphysical Writings*

The only treatise of the *Organon* that contains relevant occurrences is the *Topics*,<sup>278</sup> and some of this material is indeed difficult on my interpretation of Aristotle’s theory, but, as I pointed out at the beginning of

<sup>272</sup> For the “memory” words, cf. *MA*. 702a5–7 (*μνήμῃ*); 704a3–b2 (*μνήμη*). It should be noted that Nussbaum (1978) 251 considers the first of these two passages very important, since it constitutes, in her opinion, a revision of the theory set forth in the *De memoria*. However, it does not seem to me that the passage is sufficiently explicit to warrant the strong claim that it indicates a revision of the *De memoria*. Furthermore, it presupposes the similarly strong claim that the *De motu animalium* is “almost certainly later than the *Mem.*”. Sorabji (2004<sup>2</sup>) xvii–xviii finds the reference to the *De motu animalium* interesting, but is able to interpret the passage in accordance with the theory of pictorial images.

<sup>273</sup> *HA*. 488b24–26.

<sup>274</sup> *HA*. 587b10.

<sup>275</sup> *HA*. 581b20–21; 588b32–589a2; 608b11–15.

<sup>276</sup> *HA*. 542b24–25; 615b8–10; 618b25–26.

<sup>277</sup> *PA*. 645a30–34: ποιεῖσθαι τὴν μνήμην.

<sup>278</sup> *μνήμη* is used a few times in the famous *APo*. II.19, and ἀνάμνησις is mentioned in

this section, the *Topics* contains statements that straightforwardly and unambiguously contradict the theory of the *De memoria*.

Some of the passages are unimportant for my purpose,<sup>279</sup> but in *Topics* 111b26–31 “to know” (ἐπίστασθαι) is contrasted twice with what appears to be “to remember”, and in the first occurrence Aristotle uses μνησθαι, in the second μνημονεύειν. It must be admitted, I think, that a distinction between the two verbs in this passage would be artificial. I am not, however, terribly upset by this contradiction of my interpretation of the terms. In most of the *Topics* passages that refer to memory, Aristotle provides arguments on how to separate knowledge and memory, since they are not, he says, identical. This must be aimed at Platonists and the theory described in Plato’s *Meno* and *Phaedo*, but that theory is concerned primarily with recollection. So, what Aristotle is really discussing here is a mixture of memory and recollection, that is, a broad (or generic) concept of memory.<sup>280</sup> This might of course be used in advancing the kind of theory that Annas puts forward,<sup>281</sup> but the present passage is a singular instance of such usage in the *Corpus Aristotelicum*, and other passages in the *Topics* show that if Aristotle holds a theory of memory at all in this work, it is different from the one in the *De memoria*. The definition<sup>282</sup> has already been cited above, and I find another example in a passage in which it is said that one should rather commit general premisses than single arguments to memory.<sup>283</sup> Although it is not to be called a blatant contradiction of the definition in the *De memoria*, it does broaden the definition substantially by referring to memory rather as retention than as the present state of having an image. And furthermore, a “general premiss” would perhaps, according to the definition in the *De memoria*, be something that one *remembers* only accidentally.

The *Rhetorics* may well be treated under the same section as the *Topics*. This work contains quite a few “memory” words,<sup>284</sup> but only two

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*APr.* 67a21–22 and *SE.* 183a34–36. However, these occurrences do not help the present investigation.

<sup>279</sup> Cf. *Top.* 119b9–15 (ἀναμνησθεσθαι); 124a21–23 (ἀναμνησθεσθαι, ἀναμνησθαι); 125a40–b18 (μνημη, 7 times!); 164a3–5 (ἀπομνημονεύσεις).

<sup>280</sup> For more on the Platonic theory of recollection in Aristotle’s *Topics*, see also *Top.* 124a21–23.

<sup>281</sup> Annas (1992a).

<sup>282</sup> *Top.* 125b15–19.

<sup>283</sup> *Top.* 163b28–32: πρότασιν τε κοινὴν μᾶλλον ἢ λόγον εἰς μνήμην θετέον.

<sup>284</sup> For occurrences of ἀνάμνησις and ἀναμνησθεσθαι, cf. *Rh.* 1358b18–20; 1386a1–3; 1390a10–11; 1414b11–12; 1416b21–25; 1417b13–15; 1419b12–13; 1419b27. For some

occurrences of μνημονεύειν are found, and neither of them helps elucidate the problem.<sup>285</sup> On the other hand, it is interesting that μεμνήσθαι is used frequently, most often as a contrast to ἐλπίζειν. In particular, the passage *Rhetorics* 1370a7–b28 has 14 occurrences of μεμνήσθαι, but this tells us nothing about the relationship between μεμνήσθαι and μνημονεύειν in the *Rhetorics*.<sup>286</sup>

I have found nothing in the *Metaphysics*<sup>287</sup> or in the ethical works<sup>288</sup> to decide the issue either way. Thus, I have now examined all the major works containing frequent, or relatively frequent, occurrences of the two terms in question.

### Conclusion

Concluding on these remarks on Aristotelian terminology, I submit that there is nothing substantial in the rest of the *Corpus Aristotelicum* that goes against my interpretation of memory and recollection. On the contrary, it is supported by the occurrences in the rest of the *Parva naturalia*, and it must also be noticed that μεμνήσθαι is the more frequently used term outside these texts, while μνημονεύειν is the regular term in the psychological treatises. This may indicate either a general difference in usage, or, what I consider more likely, a difference in usage deriving from the fact that in the psychological works Aristotle is intent on delineating the concepts involved. This is only natural, since, even according to the theory of the *De memoria*, the distinction is subtle.

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occurrences of μνήμη and derivative words, cf. *Rh.* 1362b23–24; 1367a24–27; 1389a21–24; 1390a6–11; 1414b5–6.

<sup>285</sup> *Rh.* 1374b16–18: καὶ τὸ μνημονεύειν [*scil.* ἐπιεικὲς] μᾶλλον ὢν ἔπαθεν ἀγαθῶν ἢ κακῶν, καὶ ἀγαθῶν ὢν ἔπαθε μᾶλλον ἢ ἐποίησεν; 1415a32–34: τῷ δὲ διαβάλλοντι ἐν τῷ ἐπιλόγῳ διαβλητέον, ἵνα μνημονεύσωσι μᾶλλον.

<sup>286</sup> For other occurrences of μεμνήσθαι, cf. *Rh.* 1386a28–33; 1389a24–26; 1407a23–25. For an interesting transition from μεμνήσθαι + object (“to mention” or “to remind of”) to μνήμην πεποιτηκέναι (“to have made the object famous” or “to have created a memory of the object”), cf. *Rh.* 1414a4–7.

<sup>287</sup> For occurrences of “memory” words in the *Metaphysics*, cf. 980a29; 980b21, 29; 996a29–32; 1009b25–28; 1068a30–33; 1072b17–18; 1073a14–17. It can be noted that in 1068a30–33 λήθη is opposed to ἀνάμνησις, not to μνήμη.

<sup>288</sup> For occurrences of “memory” words in the *Nicomachean* and *Eudemian Ethics*, cf. *EN*. 1098a25–29; 1118a12–13; 1124b12–13; 1125a3–5; 1147b2–5; 1166a24–26; 1166b15–17; 1167b27–28; 1168a13–14; 1168a17–18; 1173b16–19; 1174a4–6. *EE*. 1231a7–9; 1236a3; 1246a24–25; 1248a40–b3.

*Appendix 2: The 21st Century Concept of Memory*

The main argument of this essay is that Aristotle's theory of memory is not like any present-day conception of memory. In this second, and final, appendix, I will try, briefly, to set forth at least some of the elements involved in a 21st century conception of memory. This is intended not so much as a description of memory (which would be an absurd claim) but rather as an attempt to convey a sense of the many differences between the Aristotelian and the modern conception of memory. Therefore, the following sketch also contains some interspersed "Aristotelian" remarks on contemporary views on memory.<sup>289</sup>

First, and most importantly, memory is an extremely broad and heterogeneous concept. Several kinds have been distinguished by philosophers and psychologists, and some basic types of long-term memory are now accepted:<sup>290</sup>

1. *Recollective* (or *episodic* or *personal*) *memory*: The subject remembers events that he or she has personally experienced. The remembered item is usually expressed as a direct object and with different time extensions. ("I remember specific events from my childhood, my breakfast this morning, etc.")
2. *Habit* (or *procedural*) *memory*: The subject remembers *how* to do something, that is, he or she has certain (embodied) skills and abilities. ("I remember how to type, how to use a knife and fork, how to dance, etc.")
3. *Propositional* (or *semantic*) *memory*: The subject remembers facts. That is, he or she remembers *that* ... ("I remember that Aristotle was a pupil of Plato, that he died in 322 B.C., etc.")<sup>291</sup>

Each of these is, I suppose, a kind of capacity, for which most people would accept the label "memory". It seems clear that the Aristotelian definition of memory cannot cover all these cases.

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<sup>289</sup> The literature on memory is vast. For a few selected introductions and recent work on both the philosophical, the psychological and the neurobiological aspects involved, cf. Warnock (1987); Schacter (1996); Engel (1999); Casey (2000<sup>2</sup>); Schacter & Scarry (2000); Tulving & Craik (2000); Sutton (2004). In particular, I am indebted to Engel (1999) for much of the psychological theory. Further literature in Sutton (2004).

<sup>290</sup> Cf. Martin & Deutscher (1966); Engel (1999) 7; Sutton (2004). Some of my examples are taken from the latter. I ignore the distinction between long-term and short-term memory.

<sup>291</sup> These are basic types, but others could be added, for instance, categorical memory ("I remember the meaning of the word 'dog'.", cf. Crick (1994) 67.

*Memory as a Mental Capacity and the Definition of Memory*

Furthermore, memory has now been established as a full-fledged mental capacity, which means that memory is related to a thinking capacity. For instance, John Sutton writes:<sup>292</sup>

... remembering is a core instance of the general, flexible human capacity to think about events and experiences which are not present, so that mental life isn't entirely determined by the current environment and the immediate needs of the organism.

Of course, Sutton cannot mean that thinking about events and experiences is a characteristic that belongs to all memory, since it is simply not true of habit memory, but it is (or can be held to be) true of both recollective and propositional memory; and, it might be added, it cannot be disputed that all kinds of memory belong in the brain. So, memory signifies very different kinds of things, including both pure thinking and something that is better described as abilities that the possessor is not necessarily conscious of having or using. With such a broad concept of memory it is not really surprising that "recollection" and "recalling" are terms, which are unreflectingly linked to memory in both ordinary and scholarly language.

Now, why do philosophers and psychologists insist on calling such apparently different capacities by the name of "memory"?<sup>293</sup> It seems that they (or most of them) have done so, because all these kinds of memory share the common characteristic of somehow retaining information and (thereby) reconstructing or making use of past experiences. Taking this as the only criterium, one must also accept that memory becomes a concept that is very difficult to handle properly and involves interdisciplinary studies, complex hierarchical structures, etc. And this is exactly what researchers have done.<sup>294</sup> Now, Aristotle intro-

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<sup>292</sup> Sutton (2004). See also Warnock (1987) 12: "Both [i.e. memory and imagination] consist in *thinking* of things in their absence." (my emphasis).

<sup>293</sup> Cf. interestingly Warnock (1987) 14: "It is oversimple to think of the memory as one 'faculty' which can be explained by one account." Instead she proposes that memory be treated as a continuum with the most general kind of memory at bottom and the most advanced and specific kind at the top. It is, however, unclear what "continuum" would mean in this context, not least because different kinds of memory have been established to belong to different parts of the brain.

<sup>294</sup> As already mentioned, Malcolm (1977), among others, questioned even the fact that memory is of the past, and therefore he is not in favour of clear-cut definitions of memory.



duced another criterium that memory has to fulfill in order to be real memory, *viz.* that it belongs to the sensing capacity, and as proved for instance by the quotation from Sutton, modern psychology and philosophy do not make the same distinction. Of course, Aristotle's division of the soul is no longer with us—at least not in its proper Aristotelian form—but still his theory is understandable, and perhaps even interesting, also in our dualistic terms.

For it would seem that in some respects Aristotle is no less refined than modern philosophy and psychology. Research has shown that different kinds of memory are affected by damage to different parts of the brain,<sup>295</sup> so why have scholars not simply accepted that these are different kinds of capabilities (although they are in some respects similar) and consequently redefined them with new names? Since consensus has long been established in this area, it would not be beneficial at this point to introduce new terminology, but, on the other hand, I do believe that some philosophical and psychological questions would benefit from a careful distinction. For instance, the problem whether or not animals possess memory is, I take it, still an open question to some researchers.<sup>296</sup> But surely, it cannot be disputed that, in a perfectly understandable sense of “remember”, animals do possess this ability. When, for instance, the celebrated bonobo chimpanzee Kanzi is able to correctly use a keyboard with symbols that signify different things and actions, and with this tool answer Savage-Rumbaugh (or even tell her something that he, apparently, *wants* (!) her to know), then Kanzi does, in a perfectly good sense of the word, *remember* which symbol to use.<sup>297</sup> Similar to this, and a very clear example of habit memory answering to our use of knives and forks, is the chimpanzee's use of a grass stem for “termite fishing”.<sup>298</sup> Apparently, even such lowly animals

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<sup>295</sup> Engel (1999) 4–5; Crick (1994) 174, but see also Crick (1994) 168.

<sup>296</sup> Cf. e.g. the first sentence of Sutton (2004): “‘Memory’ is a label for a diverse set of cognitive capacities by which humans *and perhaps other animals* retain information and reconstruct past experiences, usually for present purposes.” (my emphasis). For clear statements in favour of memory in animals, cf. e.g. Warnock (1987) 1–14; Fouts & Fouts (1993) 37–38. As is well-known, there is also substantial evidence which suggests that e.g. apes and monkeys possess cognitive skills beyond remembering, cf. e.g. Cheney & Seyfarth (1990); Cavalieri & Singer (1993); Savage-Rumbaugh & Lewin (1994); Savage-Rumbaugh & Shanker & Taylor (1998).

<sup>297</sup> See the descriptions in Savage-Rumbaugh & Lewin (1994); Savage-Rumbaugh & Shanker & Taylor (1998) 3–74.

<sup>298</sup> Cf. e.g. Goodall (1988<sup>2</sup>) 35–36.

as sea slugs and octopuses possess the kind of memory known as habituation.<sup>299</sup> On the other hand, it can still consistently be held that animals do not have the very refined capacity of recollective memory.<sup>300</sup> Recollective memory involves relating oneself to the past, that is, recognising that what is remembered is one's *own* past, and this certainly goes far beyond remembering that a particular symbol on a keyboard depicts a particular object, or that Aristotle died in 322 B.C.<sup>301</sup>

I do not want to commit myself on these vexed issues. I merely want to point out that the question: "Do animals possess memory?" is not an intelligible question without further elaboration on a present-day conception of memory, but paradoxically it is easily so on the Aristotelian theory (of course, it has to be, since animal capability of remembering is one of the basic features of ordinary experience, which a theory of memory must be able to explain). Memory is the having of an image viewed as representing something from the past. No reflection on whether the subject actually experienced what the image represents is involved, because the image and the viewing of it belong to the sensing capacity in the soul. If the thinking capacity is involved, it is no longer memory. Now, animals are characterised specifically by the ability to perceive or sense, and this is the basic ability that is needed for memory.<sup>302</sup> As the Arabic philosophers and the Latin medievals would later put it (although Aristotle is not equally explicit), memory is a kind of internal sense, and, on Aristotle's view, its content differs only substantially from the external senses in also involving time perception. (However, even perception proper can be said to involve both perception of the object and of time, *viz.* the present.) Therefore, animals cannot be denied memory. They can, however, be denied

<sup>299</sup> Cf. Crick (1994) 67; Warnock (1987) 1–2.

<sup>300</sup> For a review of recollective memory in animals, cf. McCormack (2001). The fact that such memory is so clearly a very sophisticated capacity is also an argument against Annas (1992a), who identifies it with Aristotelian *μνήμη*. Aristotle is very clear that several animals possess *μνήμη*. I think it unlikely that Aristotle would not then have reflected on the difficulties involved here. It is interesting to observe that not only in *fact* but also in *name* recollective memory conflates the two subjects treated in the *De memoria*.

<sup>301</sup> On recollective (episodic) memory, cf. in particular Tulving (1983); Wheeler (2000); Baddeley & Aggleton & Conway (2001).

<sup>302</sup> The proper physical constitution is also needed (*Mem.* 450a25–b11; 453a4–b7), which may account, at least partly, for the fact that Aristotle is not prepared to attribute memory to *all* animals, cf. *Mem.* 450a15–22; 453a6–9; *Metaph.* 980a27–29. The reason stated in the first of these passages is that not all animals perceive time.

recollection, which is a thinking capability that Aristotle attributes only to man among known animals.<sup>303</sup> Thus, Aristotle might well claim that his theory can explain issues that are muddled by our views on memory.

### *Multi-layered Memory*

Another way to view memory in modern psychology and philosophy is as a multi-layered phenomenon that can be divided into input, storage and output.<sup>304</sup> These are separate parts of the *process* of remembering, each with its own description and philosophical and scientific problems.

Such a model makes sense on a present-day conception of memory but no sense at all on the Aristotelian theory. It is true that input is a necessary condition of memory, according to Aristotle, but it is not *per se* part of remembering. Remembering can, on his view, only correspond to the output, and even here there are great differences. At this point, it is simply to be noted that whereas the modern concept demands a very elaborate framework, both concept and framework of the Aristotelian theory are relatively simple. But this is not to say that Aristotle pays no attention to input and storage; they are just not treated as memory but as perception (αἴσθησις) and as a physical process of retention.<sup>305</sup> I will comment briefly on storage and output and the closest “relatives” in the Aristotelian theory.

### *The Memory Trace: Storage and Viewing*

For all the progress made by philosophers, psychologists and neuroscientists, the conceptual difficulties surrounding memory are still thriving, as regards storage and the representational part of memory; in particular, the concept of “memory trace” is much disputed, and, equally relevant, the physical processes involved in the storing of memories are not yet known to scientists.

Reference to the past is most clearly displayed in recollective memory; in this respect it is the kind of memory most similar to the Aristotelian. So, modern philosophy and psychology have the same problem that Aristotle has: Why is it that an image in the remembering

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<sup>303</sup> *Mem.* 453a8–9; *HA.* 488b24–26.

<sup>304</sup> Engel (1999) 5–7.

<sup>305</sup> *Mem.* 450a25–b11, and compare the definition of perception in *An.* 424a17–b3. See also King (2004) 28–29.

subject is referred to the past and is not just seen as an image in the present? What is the causal relation between the past event and the present image?

Aristotle answered the question by saying that the primary sense-organ views the image in a particular way that constitutes remembering; that is, remembering is a particular *modus spectandi*. In a sense, this makes Aristotle's theory less susceptible of criticism. For had he based his entire theory on the physical side of memory, that is, on the imprint, then it would certainly be of little use to anyone in the 21st century. Later philosophers and psychologists have held bewilderingly different theories of the memory trace,<sup>306</sup> but the more viable theories of this kind have stressed (1) that there is a causal connection involving the sequence: past event—memory trace—present remembering, but (2) the memory trace is not a completely stable and solid entity but susceptible to revision and manipulation by the remembering subject and the environment.<sup>307</sup> At this point, neuroscience should be invoked before making any final pronouncements on the question of memory traces, but it is still doubtful, or at least debatable, whether or not neurology can tell the whole tale.<sup>308</sup> It is still a matter of controversy exactly what is needed.

The problem is still unsolved, but it is perhaps interesting to note that Aristotle is not merely a crude materialist as regards memory. True, he does relate the trace to his (mistaken) views about the heart as the primary sense-organ, but this is just to provide a physiological basis for the trace, and even though modern psychologists will use the brain instead, the general idea is the same. More importantly, Aristotle sees that the trace does not in itself constitute remembering: it takes a special kind of viewing, and thus Aristotle is also, at least partly, in accordance with modern psychology as regards the second requirement above, *viz.* that the trace is not a completely stable entity. However, there are also some major differences. For instance, Aristotle would not agree that a genuine memory could be something that has been created by two persons discussing a past event;<sup>309</sup> memory is not, according to him, that flexible. Thus, as regards the second requirement, he

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<sup>306</sup> For a history of the memory trace in early modern philosophy, cf. Sutton (1998).

<sup>307</sup> Engel (1999) is a lucid description of some of the contextual elements involved in remembering. See also Schechtman (1994).

<sup>308</sup> Crick (1994) is convinced that it can; for scepticism, cf. Krell (1990).

<sup>309</sup> On this modern conception of memory, cf. in particular Engel (1999).

explicitly agrees that the subject can change the viewing of an image from not-memory to memory,<sup>310</sup> and of course other people might convince the subject that a particular image was really a memory image, but he would not agree that the *content* of a memory image could be altered, and yet the image still be a memory image with the same general object reference but with a somehow different content. In this he holds what is still, I suppose, the common-sense view (and in some instances, e.g. in legal trials, even a formalised and accepted view), but it is not the (modern) scientific view.

### *Conclusion*

What then has happened to the concept of memory in the last 2,300 years to make it so much broader and heterogenous than Aristotle's? First, memory (or μνήμη) was *not* narrowly conceived in ordinary Greek language, where words such as μνημονεύειν, μεμνήσθαι and ἀναμνησθεσθαι were often used almost interchangeably.<sup>311</sup> But Aristotle felt that philosophical clarity demanded something else, and thus arose the very specific theory of the *De memoria*. As a matter of fact, a narrow kind of theory has been needed throughout most of the history of thought, because the conceptual tools available for analysis were rather limited.<sup>312</sup> As I will argue in Essay 2 below, the Arabic philosophers and the Latin schoolmen certainly did operate with the broad conception of memory found in ordinary linguistic usage, but this also resulted in somewhat less clear theories than the original Aristotelian one, and precise interpretations of Aristotle suffered accordingly. However, the 19th and 20th centuries possessed and developed quite a few tools, and different scientific and philosophical disciplines to deal with the concept of memory were established. Therefore, a broad concept was a desideratum rather than a daunting prospect, and it can perhaps still be hoped

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<sup>310</sup> *Mem.* 451a12–14.

<sup>311</sup> This was pointed out long ago by Freudenthal (1869) 402–403.

<sup>312</sup> Even in the 18th century, Hume (1739–1740/2000) 11 comes interestingly close in some respects to an Aristotelian theory: “We find by experience, that when any impression has been present with the mind, it again makes its appearance there as an idea; and this it may do after two different ways: Either when in its new appearance it retains a considerable degree of its first vivacity, and is somewhat intermediate betwixt an impression and an idea; or when it entirely loses that vivacity, and is a perfect idea. The faculty, by which we repeat our impressions in the first manner, is call’d the *memory*, and the other the *imagination*.”

that a major, general and clear framework comprising all memory can be established by interdisciplinary research.<sup>313</sup>

Thus, few would want to return to a purely Aristotelian theory of memory. But Aristotle's thoughts should not be dismissed merely because of his mistaken physiological views. After all, it is most likely that at least some modern views on physics, including some that are now generally accepted, will some day be proved mistaken and be replaced, but this might not overthrow the entire theory. The conceptual framework might stand, and in a sense this is true for Aristotle's framework. Certainly, we do not accept it, but it is not because it has been proved basically and inherently flawed. It is simply because we use a quite different framework nowadays, one that accords better with the conceptual and scientific tools available and with the goals that we are trying to achieve.

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<sup>313</sup> In fact, memory is only *part* of the even larger, and hotly debated, issue of the nature of consciousness. However, that is a subject which goes far beyond the limits of this essay.



## CHAPTER FOUR

### ESSAY 2: ARISTOTLE'S THEORIES OF MEMORY AND RECOLLECTION IN THE LATIN WEST

*Forte dicet aliquis quod theologi est tractare de anima.  
Contra. Theologus habet inquirere qua via contingat animam  
mereri et demereri, et quid sit ad salutem, quid ad penam.  
Quid autem anima sit, et in quo praedicamento sit, et qualiter  
infundatur corpori, non habet ipse inquirere, ex quo ista scire  
magis pertinent ad alium artificem. Ex quo ergo theologus  
solum habet docere qualiter sit merendum et demerendum,  
non habet ipse proprie docere quid sit anima nec quid sit eius  
essentia.*

John Blund (ca. 1200 A.D.)

#### *Introduction*

The preceding essay on Aristotle's theories of memory and recollection produced evidence to support the conclusion that his views on these subjects differ substantially from all present-day theories. Several corollaries followed, and I investigated some of them in the preceding essay. But there is another very basic conclusion which was not discussed thoroughly: Aristotle must be read in the original Greek, or at the very least the reader will have to know some Greek, if the text is not accompanied by a commentary. Otherwise, it simply is not possible to grasp the distinctions that Aristotle makes concerning remembering, recalling, and recollecting. This has consequences for our translations and understanding of the text, but it posed even more severe problems for the medieval Latin interpretations of Aristotle, which are the primary subject of investigation in this essay.

At least from the 12th century the medieval thinkers often took their point of departure simply from an Aristotelian text when examining a scientific subject: Literal commentaries and question commentaries on Aristotle, as well as disputations of different kinds, often spurred by remarks or discussions in the Aristotelian treatises, all became part of an elaborate attempt to work scientifically with subjects, some of which are nowadays considered scientific, some philosophical. True,



Christian tenets were important, but so was rational argument, and for this the schoolmen looked to Aristotle, as the philosopher who had treated a number of subjects by using reason. But, contrary to what has often been stated before scholasticism became the subject of more careful studies, the schoolmen did not simply accept Aristotelian tenets on authority: since his views were set forth by rational argument, they were (preferably) also to be tested by such means, and even though Aristotle was usually right, the medievals were well aware that he did sometimes commit errors. That is, an Aristotelian view should, according to the medievals, be assumed to be correct, but it was still to be thoroughly discussed and tested. If it did not easily accord with general human intuition (or Christian faith), one should examine whether or not Aristotle might have meant something else, which was not immediately conveyed by the wording; for instance, one or more words might be interpreted as ambiguous. But if such an interpretation could not prove that a particular theory by Aristotle was in accordance with e.g. another (and better) argument, then Aristotle's view was simply not accepted. I think it can easily be seen that this kind of scientific method will have to make very careful and sophisticated use of Aristotle's work, and thus it is to be expected, *a priori*, that the thinkers of this period developed some of the historically most interesting scientific theories on an Aristotelian foundation. Whether this holds true for the concepts of memory and recollection I will examine in the present essay.

### *The Scope of the Investigation*

Almost 2,400 years have passed since Aristotle, and he is the most studied philosopher of all times. It is therefore clear that my investigation of the Aristotelian tradition must necessarily be selective, and some discussion of the criteria for choosing a particular period and a particular group of thinkers for study is called for.

It is no easy matter to determine exactly when the Aristotelian theories of nature, including his theories of memory and recollection, lost their influence. Contemporary philosophy and natural science trace their beginnings to the 14th and 15th centuries with the complete victory of modern natural science in the 17th century. Even though Aristotelianism cannot be declared dead from the 17th century,<sup>1</sup> it can reasonably be said that Aristotelian influence on natural science and phi-

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<sup>1</sup> Cf. Fitzpatrick (1982); Trentman (1982).

losophy primarily comprises the time from the Philosopher's death in 322 B.C. until the 17th century. However, some periods are obviously more interesting than others, and the impact made by Aristotle on certain cultures is also philosophically more important than the impact made on others. To explain my choice of the Latin medieval Aristotelian tradition, focusing primarily on the reception of the Philosopher in the 12th and, in particular, the 13th centuries as the topic of investigation, a very brief sketch of Aristotelianism from the earliest times to the end of the tradition is in order.<sup>2</sup>

Aristotle's influence in the Hellenistic period on the great philosophical schools of the Stoics and the Epicureans from 322 B.C. until ca. 50 B.C. is difficult to ascertain, and the nature of the evidence simply does not allow satisfactory precision. That the esoteric Aristotle was not completely lost in the cellar in Skepsis must however be beyond dispute.<sup>3</sup>

After the appearance of Andronikos' edition, the Greek commentators are the first to claim our attention. A few of them put forward Peripatetic interpretations, notably the holder of the chair in Peripatetic philosophy, Alexander of Aphrodisias (2nd–3rd century A.D.), but most interpretations were advanced by thinkers with Neo-Platonist inclinations. A few of the earlier commentators seem to have held independent views, and some later interpreters, notably Philoponos, argued strongly against certain Aristotelian philosophical tenets, but the Greek commentators generally did not make significant, independent contributions to the development of Aristotelian ideas. Most often they were content to expound the Aristotelian text. This unreflecting usage of Aristotle became more and more pronounced in the eastern part of the empire, and it would only be a minor exaggeration to say that the 6th century A.D. saw the end of independent Aristotelian philosophy in the East, at least as regards most philosophical disciplines. From about this time the commentaries were merely expository, and this general rule is certainly true in the case of the *De memoria* commentaries and paraphrases.<sup>4</sup>

<sup>2</sup> For some useful surveys of different parts of the transmission and the reception of Aristotle, cf. Ebbesen (1981); Schmitt (1983); Green-Pedersen (1984); Sorabji (1988); Coleman (1992); Spruit (1994); Spruit (1995).

<sup>3</sup> *Contra* Sandbach (1985). For a clear argument in favour of Aristotelian influence on the Stoics, cf. Christensen (1962). See also Sorabji (1988); Annas (1992b) 47–48. On the Stoic philosophy of mind, cf. Løkke (2004).

<sup>4</sup> Cf. e.g. my notes on Metochites in Bloch (2005) 3–6.

Arabic philosophy, on the other hand, received a vital and fruitful stimulus through the Aristotelian writings. Research is still needed on this important and highly developed tradition, which takes its origin with the translations of Aristotle and related texts into Syriac and Arabic already from the 5th century and ends with Averroes (1126–1198) in the 12th century. However, this kind of research demands a thorough knowledge of the Arabic language and of the culture, neither of which I possess. Therefore, I have limited myself to the authors who, translated into Latin, made a great impact on the Latin West, that is, primarily Avicenna and Averroes, and they are not examined in their own right, but as part of the development of Latin medieval Aristotelianism. That is, they are examined as Avicenna Latinus and Averroes Latinus (Commentator).

In the Latin West, Manlius Boethius (ca. 475–524) apparently wanted to translate the entire *Corpus Aristotelicum* into Latin, but only parts of the *Organon* survive. Most of the remaining texts were translated during the 12th century and almost all, and certainly the *De anima* and the *Parva naturalia*, were in extensive use in the 13th century. Not only theologians, such as Albert the Great and Thomas Aquinas, but also the schoolmen of the *artes* faculties commented extensively on Aristotle and used his writings as the point of departure of their own theories. A wealth of fascinating material from the time after the introduction of Aristotle to the Latin West is still waiting to be published and used by modern scholars.

In philosophy Aristotle was the dominating authority from the 12th to the 16th century. However, from approximately the second half of the 14th century renaissance Humanism arose, and it grew stronger during the 15th century. Scholastics still existed, and in some places, notably in Padua and in Coimbra, a highly developed, scholastic Aristotelianism was found at a very late date, but the best period of Aristotelian philosophy since the days of the Stagirite's own Lykeion had ended.

On this sketchy interpretation of the development of Aristotelianism, it seems natural to focus attention on Aristotle's reception in the Latin West. Not only is the period, as stated, the most fruitful since his own days, but the tradition is still in large parts unpublished and unexplored. I want to stress, however, that I have not attempted to provide a comprehensive account of the *De memoria* commentaries even of this period, but I do hope to lay (part of) the foundation of further studies in this field. I will try to do this by studying more carefully the commentaries and thoughts of some of the most prominent and/or influential thinkers of the period.

*A Note on Orthography and Translation*

A brief note on the orthography of the Latin texts cited in this essay is in order.

When an edition (whether early or modern) of a relevant text has been published, I have used the edition, but I have imposed my own orthography and punctuation. The only existing modern editions of *De memoria* commentaries are Spiazzi's and Gauthier's editions of Thomas Aquinas and Kevin White's edition of Peter of Auvergne,<sup>5</sup> and in these cases I have taken full advantage of the critical apparatus which I use freely, if I believe a reading to be superior. The same applies to Wolter and Adams' edition of Scotus' *Ordinatio* IV.45.3. The adoption of a text other than the printed one has always been noted, if it is not completely trivial; for instance, I write "etc.", not "etcetera", regardless of the text in the editions. Similarly, when I have introduced conjectures of my own, this has also been noted.

When no printed edition exists, I have myself transcribed the text from medieval manuscripts. As in the case of printed editions, I have imposed my own orthography and punctuation on the text. Conjectures are always noted.

This kind of procedure I believe to be not only an acceptable and proper way of using both printed editions and manuscripts, but it is also particularly beneficial in an essay such as the present one, because all the Latin text cited will, as a result, be easily comparable.

For similar reasons all translations from Latin are my own, even when the texts exist in modern translation, as in the cases of Albert the Great, Aquinas and Scotus.

*A Sketch of the Argument*

As a final note in this introduction, it will ease the reading of the following investigations, if I sketch very briefly the argument that will be presented.<sup>6</sup>

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<sup>5</sup> But note that an edition of Adam of Buckfield's commentary (both recensions) is currently being prepared by Julie Brumberg-Chaumont and Dominique Poirel. Also, Silvia Donati is presently preparing a critical edition of Albert the Great's paraphrase.

<sup>6</sup> The arguments of this section are more fully developed below in the conclusion of this essay.

When Aristotle's theories of memory and recollection became available to the Latin schoolmen in the 12th century, they had to compete with more fully developed and more readily understandable Arabic theories (also translated into Latin in the 12th century), with the earlier Latin tradition, represented in particular by Augustine, and with common Latin usage of the term *memoria*. Aristotle's theories of memory and recollection were narrower than any of these usages, and I submit this as the reason why these particular theories, despite Aristotle's immense authority, never had the same influence as most of his philosophical doctrines were to have. Certainly, Aristotle also became an authority in this area by name, but in fact his influence did not surpass that of the Arabs, Augustine and common Latin usage of *memoria*.

In the late 12th and early 13th centuries the immense Arabic influence can be seen e.g. in the works of Dominicus Gundissalinus, John Blund and some anonymous treatises on the soul, and I argue that relatively little of Aristotle's own theory of memory is found in these authors.

Even in the late 13th century, when Aristotelianism was thriving, the interpretations of Aristotle's *De memoria* by e.g. Albert the Great, Thomas Aquinas and Peter of Auvergne were always based on the foundation established by the Arabic philosophers, and, apparently, no thinker of this period accepted the truly narrow theory of *De memoria* 1, although their own theories were not generally seen as explicitly contradicting Aristotle. Still, it is noteworthy that when they are commenting on Aristotle both Albert and Aquinas seem to propose theories that differ to some extent from the ones they present in their theological works. Thus, I argue that not even when Aristotelian studies were flourishing the most in the late 13th century did the Philosopher's theory of memory in its original form find a champion.

Around 1300 John Duns Scotus proposed a theory, which seems to take a major step towards modern theories of memory. Even though he claims to adhere to Aristotle's theories, some of the views that Scotus develops are interestingly similar to the modern conception of personal memory, and, even more importantly, he does not at all seem constrained by Aristotelian terminology and doctrine.

Clearly, minor thinkers of the 12th–14th centuries may have accepted without question the narrow Aristotelian theory, if they came to understand it.<sup>7</sup> But the great thinkers of the period did not accept it, and

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<sup>7</sup> At least, it seems clear from passages in e.g. Albert's paraphrase and Aquinas'

therefore the somewhat controversial conclusion of this essay is that Aristotle was not, despite appearances, the major influence on the medieval philosophical conception of memory.

*The Influence of Arabic Philosophy*

There were many influences on the philosophy of mind<sup>8</sup> of the middle ages. Aristotle became the basic philosophical text, but other stimulations were provided by writers such as Augustine and Boethius, and thus through different sources the Neo-Platonists and even the Stoics were also influential. However, some of the most important influences on the early Latin Aristotelian tradition came from the Arabic writers.

In the 12th century most of the *Corpus Aristotelicum* was translated into Latin, and in the 13th century Aristotelian studies were flourishing. Commentaries were as necessary then as they are now to make sense of the Philosopher's writings, and the commentator *par excellence* in the Latin world was Averroes, who wrote extensively on Aristotle's texts, and even did so in different forms, providing different kinds of commentaries ranging from the brief paraphrase of the epitome commentary to the major scientific commentary. Averroes' commentaries were translated into Latin in the first half of the 13th century. But already from the middle of the 12th century the Latins had access to another Arabic philosopher, Avicenna, whose work on the soul and its faculties had been translated in Toledo by Avendauth Israelita (who is probably Abraham ibn Daud) in collaboration with Dominicus Gundissalinus at some time in the period 1152–1166.<sup>9</sup> This work became immensely popular among theologians and philosophers, and it was often taken into account when philosophical issues of the soul were discussed. In fact, it became a standard authority in the late 12th and early 13th cen-

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commentary that these admittedly great thinkers did actually understand Aristotle's final definition of memory to be narrow.

<sup>8</sup> Throughout this essay I will regularly describe the ancient and medieval theories of the soul as "philosophy of mind" or "psychology". Even though it is clear that there is a great difference compared to contemporary disciplines, I do not think that much harm will come from such usage.

<sup>9</sup> Cf. van Riet (1968–1972, vol. 1) 95\*; Hasse (2000) 4–5. Avicenna also wrote other psychological works, but none of these (except the medical work *Canon medicinae*, whose first book treats psychology) were available to the Latins. For a list of these other works, cf. Hasse (2000) 3–4.

tury. Thus, the Arabic tradition was very much part of the philosophical foundation of the earliest Latin thinkers that I shall examine,<sup>10</sup> and descriptions of their ideas and interpretations are therefore in order.

I must, however, stress that I use only the Latin translations of the sources. This approach is easily justified, I believe, since my primary purpose is to establish the Arabic influence on the Latin medievals, and they read Avicenna and Averroes in Latin translations. I have also found it reasonable to refer to the Latin titles of their works instead of the Arabic titles, and to the Latin transcriptions of their names.

So, the influence of the Arabic philosophers on the Latin thinkers was immense. However, interestingly it seems that the Arabic thinkers did not know the *Parva naturalia* well.<sup>11</sup> No Syriac or Arabic translation has yet been found, and even more importantly: the theories found in the Arabic philosophers are often very different from those in Aristotle.<sup>12</sup> Gätje has illustrated this concerning dreams, as interpreted by Averroes and Aristotle respectively, and the situation is similar as regards memory. According to Gätje, followed by Gauthier,<sup>13</sup> even Averroes, who wrote an epitome commentary on the *Parva naturalia*,<sup>14</sup> may well have been working from some sort of abstract or adaptation of the text. This seems likely and serves at least partly to explain the differences between Aristotle and the Arabic philosophers that will be presented below,<sup>15</sup> but as a consequence the Latin thinkers, who could not know the true foundation of the Arabic theory, were faced with theories that might not be easily reconcilable.

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<sup>10</sup> Roger Bacon's brief sketch of the history of philosophy in his *Opus maius* is very revealing as regards the influence of the Arabics, proceeding directly from Aristotle to Avicenna (*Opus maius* II.13, ed. Bridges 1897–1900, vol. I, 55–56): “Avicenna quidem praecipuus imitator et expositor Aristotelis, et complens philosophiam secundum quod ei fuerit possibile, [...]. Post hunc venit Averroes, homo solidae sapientiae, corrigens dicta priorum et addens multa, ...” = “Now, Avicenna, in particular, was imitator and expositor of Aristotle, and he completed philosophy, as far as it was possible for him to do so, [...] After him [*scil.* Avicenna] came Averroes, a man of solid wisdom, who corrected and added much to what had been said by former thinkers ...”. See also below on the early Latin tradition and on the working methods of Albert the Great, who was one of the first thinkers to fully absorb the 12th century translations of Aristotle.

<sup>11</sup> On the *Parva naturalia* in Arabic thought, cf. Steinschneider (1883/1891); Gätje (1971) 81–92; Pines (1974); di Martino (2003).

<sup>12</sup> Cf. Gätje (1971) 85: “In der Tat finden sich bei Averroes und anderen Philosophen Lehren, die diese auf die *Parva naturalia* zurückführen, die sich aber bei Aristoteles in dieser Form nicht finden, sondern später eingedrungen sein müssen.”

<sup>13</sup> Gätje (1971) 85–86; Gauthier (1985) 111\*–116\*.

<sup>14</sup> See the section on Averroes below.

<sup>15</sup> In addition to the points that will be mentioned below, one should note Averroes,

*Avicenna* (ca. 980–1037)

Avicenna accepted Aristotle's framework of the tripartite soul.<sup>16</sup> Certainly, in some cases he differs substantially from the original Aristotelian theory, notably as regards the immortality of the soul, but still the foundation of his psychology is Peripatetic. However, his views are generally much more elaborately worked out and much more explicit than their Aristotelian counterparts. Avicenna is not responsible for every new feature of the theory, but that is not important for my purpose, and in fact it was not important to Avicenna himself. In the biography by his disciple al-Juzjani, the following exchange between master and disciple is recorded:<sup>17</sup>

Then I [*scil.* al-Juzjani] asked him [*scil.* Avicenna] myself to comment on the books of Aristotle, but he brought up that he had no leisure at that time. "But if you would like me to compose a book in which I will set forth what, in my opinion, is sound in these [philosophical] sciences, without debating with those who disagree or occupying myself with their refutation, then I will do that." I was pleased with this and he began with the *Physics* of a book which he called *The Cure*.

If this statement can be trusted—and the work of Gutas convincingly demonstrates that there is every reason to think that this is so<sup>18</sup>—then Avicenna takes full responsibility for the opinions set forth in the *Liber de anima*, which is part of *The Cure* (often referred to, also in western publications, by the Arabic title: *Kitab al-Shifa*).<sup>19</sup> Thus, Avicenna's *Liber de anima* must be distinguished, e.g., from Averroes' commentaries, whose proper purpose was to elucidate the Aristotelian text, although, as will

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*Compendium de memoria*, ed. Shields (1949), 62–63, in which passage Averroes refers to Aristotle as the source of a story that is not found in our Aristotle.

<sup>16</sup> My exposition of Avicenna's views is based solely on the *Liber de anima* (ed. van Riet 1968–1972). For recent literature on Avicenna and, in particular, his views on psychology, cf. Rahman (1952); Gutas (1988); Hasse (2000).

<sup>17</sup> Cited from the translation in Gutas (1988) 101. Also found in Arberry (1952) 22. See further the comments in Gutas (1988) 101–103, 110–111, and the passage cited in Gutas (1988) 40–43. More substantial material on Avicenna's life and his relation to Aristotelian thought is collected in Gutas (1988) 15–78.

<sup>18</sup> Gutas (1988). Still, it must be noticed that the scenario where a master is asked by disciples or confrères to comment on Aristotle was apparently a topos—or at least it became one. For a later example, cf. Albertus Magnus, *Physica*, ed. Hossfeld (1987–1993, vol. IV.1), 1a.

<sup>19</sup> For the plan of his *Liber de anima*, cf. Avicenna, *Liber de anima* I.1, ed. van Riet (1968–1972, vol. I), 9–13. See also the passages quoted above from the biography by al-Juzjani (= Gutas 1988: 101).



become clear, there is a lot of independent material in Averroes' commentaries as well. True, some Latin writers, e.g. John Blund, did regard Avicenna's *Liber de anima* as a commentary (*commentum*) on Aristotle's *De anima*,<sup>20</sup> but this was not the general opinion of the Latin thinkers, and even Blund himself regards Avicenna as an authority in his own right (*auctor*).

The thoughts and doctrines that we find in Avicenna might therefore reasonably be considered Avicennian doctrines based on an Aristotelian foundation. And, in fact, the *Liber de anima* supports this conclusion. True, Avicenna often follows a plan that is in large parts determined by the structure of Aristotle's *De anima*, but this is explained by the fact that he knew and remembered the structure of the *De anima*.<sup>21</sup> There was no reason to divert from the exposition of the great philosopher when it suited Avicenna's own purposes, but any reader of the *Liber de anima* will appreciate that quite a lot has happened since the days of the Stagirite.

### The Medieval Recensions

Before proceeding to the philosophical issues, a brief note is needed as regards a common phenomenon in medieval texts: different recensions of the same work.<sup>22</sup>

Of the 50 extant manuscripts that contain the *Liber de anima*,<sup>23</sup> 31 have one textual tradition (= B) and the remaining 19 another (= A). The editor, Simone van Riet, chose to print the B tradition found in the majority of the manuscripts, believing that this was the older, and so naturally this is also the tradition that I have used. Access to the second tradition may, however, be obtained by using her critical apparatus. It must be noted that scholars do not agree as to which recension is the oldest. Since the translator Gundissalinus has used the A tradition in his own *Liber de anima*, and since later scholars (e.g. Albert the Great) used the B tradition, it is, I think, most probable that the A tradition is older than B. It might, however, be argued that B was the original translation, which was revised by Gundissalinus, before he wrote his *Liber de anima*,

<sup>20</sup> Cf. e.g. Johannes Blund, *Tractatus de anima* §§89, 145, ed. Callus & Hunt (1970), 24, 39 *et passim*.

<sup>21</sup> Avicenna's remarkable memory is nicely illustrated by his autobiography. For translations, cf. Arberry (1952) and Gutas (1988) 22–30.

<sup>22</sup> For the following, cf. van Riet (1968–1972, vol. I), 105\*–121\*.

<sup>23</sup> Distributed as follows: 13th century = 35; 14th century = 14; 15th century = 1.

and that the B version did not circulate extensively until about 1240–1250.<sup>24</sup> Even that would, however, be somewhat strange, because at this time Avicenna was rapidly losing ground to Aristotle and Averroes. If the B version did not circulate widely before the decline of Avicenna's philosophy, it seems unlikely that this tradition would grow to be the larger.

### Internal senses

Our main question must be: how does Avicenna treat memory (*memoria*, *virtus/vis memorialis*)? The answer is: somewhat differently from the Aristotelian treatment, and I believe that the reason for this is to be found primarily in two concepts not present in Aristotle: internal senses (*sensus interiores*) and intention (*intentio*).<sup>25</sup> I shall treat these in turn.

Aristotle viewed sensing (αἰσθησις) as a process, through which *external* forms were obtained without matter.<sup>26</sup> These could afterwards be used in the inner (mental) processes occurring in animals and human beings, that is, in thought, imagination, memory, dreams etc. He is adamant that sensing is a process whereby the perceiver obtains the form of a present, external object in the present time. Even though there is a passage in *De memoria*, which is interesting for using the term “sense” (αἰσθάνεσθαι) to signify what happens in imagination and memory,<sup>27</sup> Aristotle does not recognise any internal senses. However, a doctrine of internal senses would be a natural development, both from the Aristotelian terminology and from the scattered remarks on φαντασία in *De anima* III; and indeed we find in Avicenna a full-fledged theory dividing the senses into external senses (*sensus exteriores*) and internal senses (*sensus interiores*).<sup>28</sup>

<sup>24</sup> Hasse (2000) 8 has established that the B tradition printed by van Riet is used by Albert the Great (ca. 1200–1280), and also that Dominicus Gundissalinus (12th century) and John Blund (ca. 1175–1248) quote the A tradition. John of La Rochelle (?–1245) apparently knew both traditions (cf. Hasse 2000: 49–50).

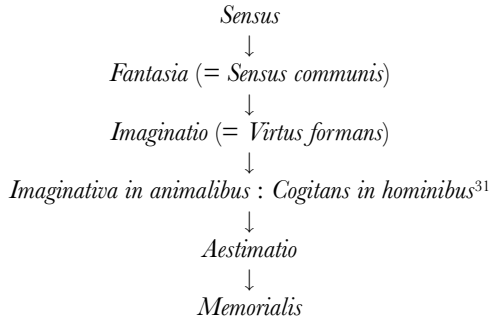
<sup>25</sup> As regards “intentio”, the term did, however, enter into the Aristotelian tradition through the translations. Cf. Spruit (1994) 90 on *De anima* II.12.

<sup>26</sup> The key text is *An.* II.12, but see also *An.* II.5–11; *An.* III.1–2; *Sens. passim*.

<sup>27</sup> *Mem.* 450b18–451a8.

<sup>28</sup> For scholarly treatments of the theory of internal senses, cf. Wolfson (1935); Rahman (1952) 77–83; G. Verbeke in van Riet (1968–1972, vol. II) 46\*–59\*; Steneck (1980) 273–275. Nicholas Steneck's *The Problem of the Internal Senses in the Fourteenth Century* (Ph.D. dissertation, University of Wisconsin 1970) has not been available to me.

The Avicennian theory of the external senses basically agrees with the Aristotelian theory,<sup>29</sup> and these external senses are the basis of the internal senses, since the former provide the latter with their content. Contrary to the external, the internal senses proceed on a flow-chart structure that may be illustrated as follows:<sup>30</sup>



A brief explanation. The objects of internal sensation are ultimately all derived from external sensing or perceiving (*sensus*). The impressions, or rather the sensible forms (*formae sensibiles*), of the individual senses proceed to the *fantasia* or *sensus communis*, at which point a complete image is constituted by connecting the individual sense objects of the proper senses. This impression can then be transmitted to the *imaginatio* or *vis/virtus formans*, which is the faculty that retains the form that was constituted by the *fantasia*. The forms found in *imaginatio* can be called forth internally and combined or separated individually by a third internal sense, which is called *imaginativa* when one refers to this faculty as present in animals (in which case it is commanded by the animal soul), but *cogitans* when one refers to the faculty in human

<sup>29</sup> For Avicenna's comprehensive description, see *Liber de anima* I.5, ed. van Riet (1968–1972, vol. I), 83–85; *Liber de anima* II.3–III.8, ed. van Riet (1968–1972, vol. I), 130–283.

<sup>30</sup> Cf. Avicenna, *Liber de anima* I.5, ed. van Riet (1968–1972, vol. I), 85–90, 99–101. For Avicenna's more elaborate discussion of internal senses, cf. Avicenna, *Liber de anima* IV.1–3, ed. van Riet (1968–1972, vol. II), 1–54. It must be noted that Avicenna's terminology is not completely consistent, and even though the general structure seems to be well established, the precise abilities inherent in some of the concepts, in particular *imaginativa/cogitans* and *aestimatio*, are unclear.

<sup>31</sup> This faculty has at least two functions: (1) bringing forth internal images to be used by estimation (e.g. *Liber de anima* I.5, ed. van Riet, 1968–1972, vol. I: 100–101; see the explanations below), and (2) combining images stored in *imaginatio* (e.g. *Liber de anima* IV.1, ed. van Riet, 1968–1972, vol. II: 6).

beings (in which case it is commanded by the intellect); the major difference is that human beings can use their mind to make internal images appear and combine or separate them at will; the process is not equally controlled in animals.<sup>32</sup> The fourth internal sense in the structure, *aestimatio*, comprehends “unsensed intentions” (*intentiones non sensatae*),<sup>33</sup> and the fifth, *vis/virtus memorialis*, retains these unsensed intentions of the estimative faculty. Avicenna adds explanatorily that the relationship between *vis memorialis* and *aestimatio* is similar to the relationship between *imaginatio* and *sensus*,<sup>34</sup> in which case *sensus* must be taken to mean the apprehension of a form in general. This means that *memoralis* is related to unsensed intentions, as *imaginatio* is related to sensible forms.

Thus, according to Avicenna there are two retentive faculties, *imaginatio* and *vis memorialis*, and they each retain different objects.<sup>35</sup> Aristotle had stated that memory was essentially a matter of having the forms present to attention in your soul, and thus his theory of memory would seem at the very least to include the *imaginativa/cogitans* of Avicenna's theory. But the *memoralis* of the Avicennian theory is concerned with the retaining of intentions, and these have no direct counterpart in Aristotle.<sup>36</sup>

Two further points should, however, be made in order to understand the later developments in Averroes and the Latin tradition. First, in the initial definition of the internal senses, Avicenna Latinus actually names the memorative faculty *vis memorialis et reminiscibilis*, not just *vis* (or *virtus*) *memoralis*.<sup>37</sup> This description was certain to confuse later Peripatetics, since it conflates memory and recollection, which Aristotle was so

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<sup>32</sup> In one passage (*Liber de anima* I.5, ed. van Riet, 1968–1972, vol. I: 89) it is, however, suggested that maybe the ability to divide and combine images belongs to *aestimatio*. This capacity of the faculty is unfortunately somewhat unclear (see below and, more substantially, Hasse 2000: 127–153).

<sup>33</sup> For a distinction between different kinds of intentions, cf. Avicenna, *Liber de anima* IV.1, ed. van Riet (1968–1972, vol. II), 6–8. See also the section on intentions in Avicenna below.

<sup>34</sup> Avicenna, *Liber de anima* I.5, ed. van Riet (1968–1972, vol. I), 89–90.

<sup>35</sup> See also Avicenna, *Liber de anima* IV.1 & IV.6, ed. van Riet (1968–1972, vol. II), 8–11 & 145–146.

<sup>36</sup> Aristotle does recognise (*Mem.* 450a12–14) that there are secondary objects of memory, notably thoughts, but he does not elaborate on the idea, and nothing like *intentiones* is found in the *De memoria*, although Avicenna would probably, and Averroes would certainly, disagree. Judging from *An.* 431b2–19, Avicenna's intentions would be objects of the intellect, not a sensing faculty, according to Aristotle.

<sup>37</sup> Avicenna, *Liber de anima* I.5, ed. van Riet (1968–1972, vol. I) 89.

careful to separate conceptually. The second, and related, point is that even though Avicenna certainly conceives the memorative faculty primarily as retentive, some passages suggest to the interpreter that memory should be construed more broadly. The mere fact that the faculty is called *memoralis et reminiscibilis* in the initial definition shows that Avicenna also attributes an activity to this faculty; and in the more thorough analysis of the internal senses in the *Liber de anima*, book IV, he makes a distinction in this faculty between the preserving ability (*virtus custoditiva*), which merely retains the intentions, and the memorative ability (*virtus memorialis*), which brings forth intentions that have been forgotten.<sup>38</sup> As we shall see, Latin interpreters used this duplicity in the Avicennian treatment of memory already from the end of the 12th century to form more comprehensive theories than the Avicennian, and even before these Averroes elaborates and clarifies this particular distinction between pure retention and actualisation of the retained content.

### Intentions<sup>39</sup>

The precise meaning of *intentio*, a concept with a prominent place in the history of philosophy, is very difficult to grasp, comprising, as it eventually did, elements of logic, metaphysics, ethics, natural philosophy and philosophy of mind. I shall focus attention exclusively on the features that are relevant to the discussion of memory.

The most famous illustration in Avicenna is a passage of the *Liber de anima* which was often used by the Latin scholastics and deserves to be quoted:<sup>40</sup>

Differentia autem inter apprehendere formam et apprehendere intentionem est haec: quod forma est illa quam apprehendit sensus interior et sensus exterior simul, sed sensus exterior primo apprehendit eam et postea reddit eam sensui interiori, sicut cum ovis apprehendit formam

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<sup>38</sup> Avicenna, *Liber de anima* IV.1, ed. van Riet (1968–1972, vol. II), 9–11. Apparently, Avicenna thinks that *aestimatio* is involved in the calling forth of intentions, but not only does he explicitly divide the faculty of memory in two; he also expresses the thought that in a sense *aestimatio* is a *virtus memorialis*. For the same ambiguity in Roger Bacon's theory, cf. Tachau (1988) 11n23 with references.

<sup>39</sup> On intentions according to Avicenna, cf. Tachau (1988) 12–14; Hasse (2000) 127–153. See also, more generally on the Arabic conception of intentions, Spruit (1994) 79–95.

<sup>40</sup> I.5, ed. van Riet (1968–1972, vol. I), 86. See also IV.3, ed. van Riet (1968–1972, vol. II), 37–39.

lupi, scilicet figuram eius et affectionem et colorem, sed sensus exterior ovis primo apprehendit eam et deinde sensus interior; intentio autem est id quod apprehendit anima de sensibili, quamvis non prius apprehendat illud sensus exterior, sicut ovis apprehendit intentionem quam habet de lupo, quae scilicet est quare debeat eum timere et fugere, quamvis non hoc apprehendat sensus ullo modo. Id autem quod de lupo primo apprehendit sensus exterior et postea interior, vocatur hic proprie nomine formae; quod autem apprehendunt vires occultae absque sensu, vocatur in hoc loco proprie nomine intentionis.

The difference between apprehending the form and apprehending the intention is the following: Form is what is apprehended both by the internal and the external sense, but the external sense apprehends it first and then transmits it to the internal sense, as when the sheep apprehends the form of the wolf, that is, its shape, its disposition and its colour, in which case the external sense apprehends the form first and then the internal sense does. Intention, on the other hand, is what the soul apprehends about the sensible object, even though the external sense has not first apprehended it, as when the sheep apprehends the intention that it has about the wolf, namely the reason why it should fear it and run away, even though this is not something that sense apprehends in any way. Now, that which first the external sense and then the internal sense apprehend about the wolf is here properly called by the name of form; but that which the hidden capacities apprehend separate from sensing is in this place properly called by the name of intention.

I think this passage illustrates well what made the Arabic philosophers feel the need for intentions. Aristotle's theory provided the framework for perception of the proper sensibles (colour, smell, sound etc.), common sensibles (figure, motion etc.) and accidental sensibles (the son of Diaries etc.),<sup>41</sup> but it did not explain why sheep regularly react with fear when they see a wolf. According to the Arabic philosophers, there must be something about the wolf itself which causes the (very reasonable) reaction in the sheep, and this "something" is perceived by the sheep, but not through any of the senses analysed by Aristotle in the *De anima* and the *Parva naturalia*. Thus, drawing mostly upon other sources (probably the Stoics and Galen in particular), the Arabic thinkers established not only the internal senses described in the preceding section but also a new kind of sensible: an intention.<sup>42</sup>

An intention, then, is something that you do not sense with your external senses, but still it is a kind of sensing performed by the inter-

<sup>41</sup> Cf. *An.* II.6; III.1.

<sup>42</sup> See also Aquinas' analysis below in the section on Thomas Aquinas.

nal sense called estimation (*aestimatio*).<sup>43</sup> Avicenna also mentions another kind of intentions, *viz.* objects that are actually sensibles but are not perceived at the time when one judges what is (truly) sensed.<sup>44</sup> For instance, if I look at the ocean from a distance, I also sense that it looks (!) wet and cold, although I feel neither the wetness nor the cold at the time of seeing the ocean. This last kind of intentions establishes a stronger connection with the proper sensibles,<sup>45</sup> and here one would be tempted to say that the intention is not really found in the object, that is, as an entity that exists even without a perceiving subject. Thus, in the example with the sheep that perceives the danger of the wolf the intention is entirely bereft of truly sensible qualities, and we might think it difficult to conceive of the intention as distinct from the perceiving subject; but apparently Avicenna did not.<sup>46</sup> And furthermore, as (the Latin) Avicenna also indicates, intentions sometimes do signify entities that possess some level of sensible quality. In another passage Avicenna even uses colour and figure as examples of intentions, and thus, perhaps, indicates that the form is composed of intentions (in the sense of constituents of the form).<sup>47</sup> The former kind of intentions is dominant in Avicenna's *Liber de anima*, but the latter will become more dominant in Averroes' epitome.<sup>48</sup>

About estimation it may be noted that although the preliminary structure described above makes *aestimatio* depend on the faculty that brings forth internal images that have formerly been stored, there actually seems to be no reason why *aestimatio* could not apprehend

<sup>43</sup> Cf. also Avicenna, *Liber de anima* II.2, ed. van Riet (1968–1972, vol. I), 118–119.

<sup>44</sup> Avicenna, *Liber de anima* IV.1, ed. van Riet (1968–1972, vol. II), 6–8.

<sup>45</sup> Spruit (1994) 86 notes that the Latin Avicenna “does not draw sharp distinctions” between intention and form, but the highly structured theory of internal senses as well as the passage about the wolf and the sheep seem to prove that this is not completely true. And, in fact, Spruit (1994) 88 acknowledges that there are two ways “in which sensible objects might be present in the soul: as ‘forma’ or as ‘intentio’.”

<sup>46</sup> Cf. Hasse (2000) 130–132 with reference to Avicenna, *Liber de anima* IV.3, ed. van Riet (1968–1972, vol. II), 37: “... oportet inquirere ... qualiter scilicet apprehendat [*scil.* *aestimatio*] intentiones quae sunt in sensibilibus ...” = “... we must inquire ..., that is, how estimation apprehends the intentions that are in the sensible objects.” See also Hasse (2000) 135–136. Furthermore, some Latin authors, e.g. Johannes Blund, *Tractatus de anima* §256, ed. Callus & Hunt (1970), 69, also talks about “the intention which is found in the wolf” (*intentionis existentis in lupo*) when discussing the famous sheep-wolf example.

<sup>47</sup> Avicenna, *Liber de anima* II.2, ed. van Riet (1968–1972, vol. I), 118.

<sup>48</sup> See the section “Averroes (1126–1198)” (subsection “Averroean Intentions and the Arabic Legacy”) below.

intentions directly from the *fantasia* instead of waiting until the content of the form has been committed to *imaginatio* and has been made to appear by *cogitans* or *imaginativa*. This suggestion also appears to be supported by the example of the sheep seeing the wolf, and it is further substantiated in another passage, in which Avicenna indicates that the *virtus aestimativa* has access to the *sensus communis*.<sup>49</sup> Thus, he is not completely clear on the precise capabilities of *aestimatio*, but that is not very important for my purpose.<sup>50</sup>

### Concluding remarks on Avicenna

This brief sketch of some details in Avicenna's philosophy of mind serves to point out that the Aristotelian theories of sensation and memory that the Latins inherited and upon which they based much of their own thinking had been supplemented by some concepts that were foreign to (or at least not found in) Aristotle's philosophy. In particular, the internal senses and intentions were to become popular in philosophical theories and much used in the Latin tradition, and certainly it gave the schoolmen a much broader perspective on remembering and recollection than Aristotle had.

### *Averroes (1126–1198)*<sup>51</sup>

Averroes was *the* commentator, that is, his were the commentaries that usually accompanied the Aristotelian texts.<sup>52</sup> But the commentaries were not all of the same kind. Averroes wrote three kinds of commentaries: the epitome or compendium, the middle commentary and

<sup>49</sup> Avicenna, *Liber de anima* IV.1, ed. van Riet (1968–1972, vol. II), 4–5.

<sup>50</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 56 also indicates that an imaginative faculty must precede, although he is not generally very clear on this issue either. However, John Blund (*Tractatus de anima* §§250–261, 346–347, ed. Callus & Hunt 1970: 67–71, 94–95) does not recognise an intermediate faculty between *imaginatio* and *aestimatio*, and Avicenna (Latinus) says himself (*Liber de anima* IV.1, ed. van Riet, vol. II, p. 5) that some omit this faculty from the list. For a more general evaluation of estimation in Avicenna's philosophy, cf. Black (1993).

<sup>51</sup> This section on Averroes reproduces the arguments and conclusions that I have previously published in Bloch (2006).

<sup>52</sup> The following is based primarily on Averroes' epitome of the *Parva naturalia* (= Averroes 1949, *De memoria* = pp. 47–72; English translation, but from the original Arabic text and therefore somewhat different, in Blumberg 1961). See also the large commentary on the *De anima* (= Averroes 1953).



the large commentary, ranging from simple, brief and somewhat independent paraphrase (the epitome commentary) to the carefully argued and highly philosophical exposition (the long commentary). The extant commentary on the *Parva naturalia* is an example of the epitome commentary, and the brief paraphrase of the *De memoria* takes up only 26 small pages in the edition.<sup>53</sup> It must be noted that the theory presented is, it seems, much more in line with Avicenna than with Aristotle, and scholars of the 21st century will consider it very difficult to use as an aid to understanding Aristotle. As a matter of fact, it seems very doubtful that Averroes had access to the Aristotelian text of the *De memoria* that has been transmitted to our times; he is likely to have used some kind of compendium much like the text that he himself presents. However, the Latin medievals did use the epitome as a key to Aristotle, and therefore it is necessary to analyse and discuss the contents. According to Shields, Averroes did not write middle or long commentaries on the *Parva naturalia*.<sup>54</sup> The Latin translation of Averroes' epitome was probably made by Michael Scotus (ca. 1175 – ca. 1236) in the first quarter of the 13th century or a little later.

### The Medieval Recensions

As was also the case with Avicenna, it must be noted that Averroes' text existed in two quite different recensions; these are printed by Shields as *versio vulgata* and *versio Parisina*. The former, as the name suggests, is found in several manuscripts, while the latter exists only in a single manuscript and seems to be a revision of the former.<sup>55</sup> The *versio vulgata* is therefore the most important for the purpose of establishing the possible influences on the Latin medievals, since this was the text that was generally consulted.<sup>56</sup> Unless otherwise explicitly stated, I refer to the *versio vulgata*. It should be noted that this version is also more faithful to the Arabic text than the *versio Parisina*.<sup>57</sup>

<sup>53</sup> Shields (1949) 47–72.

<sup>54</sup> Shields (1949) xiii.

<sup>55</sup> Shields (1949) xiii–xxx. The manuscript containing the *versio Parisina* (= Par., BNF, lat. 16222) is a 13th century copy. See also Gauthier (1985) 111\*–116\*.

<sup>56</sup> But the terminology of an anonymous author (probably ca. 1245–1250 in Oxford) of some glosses (*notulae*) on the *De memoria*, transmitted in the manuscript Milano, Ambr. H 105 inf., may suggest that he used the *Parisina*, cf. Gauthier (1985) 117\*.

<sup>57</sup> See Black (1996) 162n3.

### Averroean Intentions and the Arabic Legacy

Before proceeding to the interpretation, the relatively vague theory of intentions that was found in Avicenna's *Liber de anima* can be supplemented from Averroes' commentary, and some conclusions can be drawn concerning the concept of intention that was inherited by the Latins.

Averroes explicitly states that it is the same sensible form that is found in the image and in the intention; it differs only in degree of spirituality (*spiritualitas*).<sup>58</sup> The more precise difference is illustrated in a few passages. Averroes says that in the imaginable form that the imaginative faculty calls forward internally the intention constitutes the particular form of this image.<sup>59</sup> This seems to signify the constitutive elements of the form, that is, the most basic elements of form separated from its subject.<sup>60</sup> Note however that memory is concerned with particulars, and thus the intentions must represent the basic structural features of the *individual* form.<sup>61</sup> The image proper, on the other hand, is constituted by features needed in order for such a representation to be properly made, e.g. lines and figure. Averroes' point is illustrated by the example of a wall that has been perceived:<sup>62</sup> The image actually painted on the wall is represented in the imaginative faculty, while the intention of the picture on the wall is apprehended by the rememorative faculty.

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<sup>58</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 58–59. This is contrary to the passage from Avicenna cited above, in which “intention” and “form” were contrasted as two different objects, but see Avicenna, *Liber de anima* II.2 & IV.1, ed. van Riet (1968–1972), 118–119 (vol. I) and 6–8 (vol. II). Tachau (1988) 15–16, 22–23 seems to have overlooked this Averroes passage in her criticism of Roger Bacon's interpretation of Averroean intentions.

<sup>59</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 53–54: “in formis enim imaginabilibus est aliquid quasi subiectum, scilicet lineatio et figura, et aliquid quasi forma, et est intentio illius figurae.” = “for in imaginable forms there is something that is like a subject, viz. line and figure, and something else that is like form, and it is the intention of this figure.”

<sup>60</sup> On this conception of intentions, see also Averroes, *In de anima*, ed. Crawford (1953), 421. In the *versio Parisina* (ed. Shields 1949: 54) this is exemplified with such “imaginative” elements as “colour” and “figure”, which are Avicennian illustrations (see *Liber de anima* II.2, ed. van Riet, 1968–1972: 118), indicating, perhaps, that the form is actually composed of intentions. This was certainly the view of al-Hazen (965–1040), cf. Tachau (1988) 14–15. “Colour” and “figure” are called “material intentions” (*intentiones materiales*) and distinguished from non-material intentions (*intentiones non materiales*) such as “goodness” (*bonitas*) and “badness” (*malitia*).

<sup>61</sup> Cf. Black (1996) 169. See also Spruit (1994) 143.

<sup>62</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 55–56.

The Latins inherited the concept of intention from the Arabic philosophers, and it was applied in many different philosophical contexts. The species that are transmitted in perception somehow involved the intention, but in what sense was never made completely clear: sometimes the image and the intention were both regarded as *contained* in the species as different kinds of sensibles, sometimes the intention *constituted* the form of the image, and sometimes the intention is not strictly speaking part of the ontology of the species but derived from it by the perceiving subject. It is no wonder that the Latin theories of memory did not really attempt to incorporate intentions as an element distinct from images, Aquinas being the notable exception, as we shall see later.

### The Epitome of the *De Memoria*<sup>63</sup>

Much is obscure in the epitome, in particular concerning the use of *rememoratio*, which is a term of prime importance. In the following I do not attempt to cover all the difficulties of Averroes' interpretation, but rather I try to set forth the (Latin) Averroean theory of memory and recollection, as coherently as I possibly can.

The first peculiar feature of Averroes' epitome of the *Parva naturalia* is terminological and a very important one. The title chosen by Shields (although there is some confusion in the manuscripts) is *Compendium libri Aristotelis De memoria et reminiscencia* in accordance with the generally accepted Aristotelian title, but the opening sentence of the epitome reads as follows:<sup>64</sup>

Iste tractatus incipit perscrutari de rememoratione et inquisitione per rememorationem et dicit ...

This treatise goes on to study remembrance and search through remembrance, and says ...

This corresponds to Aristotle's *De memoria* 449b4–6, the passage in which “memory” (μνήμη) and “recollection” (ἀνάμνησις) are distinguished. But in Averroes the word *rememoratio* (“remembrance”) occurs in the descriptions of both:<sup>65</sup> there is a single capacity of *rememoratio* and this capacity can be used in a particular way (*inquisitio per rememorationem*)

<sup>63</sup> On Averroes' theory of memory, cf. Coleman (1992) 401–415 and Black (1996). However, I have some fundamental disagreements in particular with Coleman's interpretation, which will be discussed below.

<sup>64</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 47.

<sup>65</sup> Note, however, that this is not so in the original Arabic (*al-dhikr* = *rememoratio*;

to produce certain results. Thus, the conceptual distinction made by Aristotle has been blurred from the very first sentence, and throughout the epitome the Latin Averroes alternates freely between analyses of *rememoratio* and *inquisitio per rememorationem*, making it difficult to distinguish clearly between “memory” and “recollection”.<sup>66</sup> And the theory is made even more difficult by the use of a third descriptive phrase: *actio virtutis rememorativae*. In fact, even though the distinction is clearer in the Arabic version, Averroes is, as we shall see, probably well aware that he has more or less abolished the conceptual distinction, and thus the Latin translation is not completely wrong in using *rememoratio* in the descriptions of both memory and recollection. The Latin Averroes has *rememoratio* throughout the commentary; a more precise meaning of the term must therefore be established.<sup>67</sup>

*Rememoratio* is explicitly defined several times in the epitome, usually in opposition to *investigatio per rememorationem*. The first definition presents the basic features of the term and of *investigatio per rememorationem*.<sup>68</sup>

1. *Rememoratio* = “the return in the present of an intention apprehended in the past” (*reversio in praesenti intentionis comprehensae in praeterito*).
2. *Investigatio per rememorationem* = “A search for this intention through the will and to make it present after a period of absence” (*inquisitio istius intentionis per voluntatem et facere eam praesentari post absentiam*).

A similar second description uses “cognition” (*cognitio*) instead of “return”, and it is specified that a period without direct cognition must occur before remembrance can take place, but the passage does not otherwise add to the first.<sup>69</sup> These descriptions could perhaps be con-

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*al-tadhakkur* = *investigare per rememorationem*). Cf. Black (1996) 162–163n5. But the Latin thinkers had no way of knowing this.

<sup>66</sup> Thus, e.g. Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 57a uses this lack of distinguishing in favour of the claim that recollection does not belong to the rational soul.

<sup>67</sup> But note that the *versio Parisina* often uses the regular “Aristotelian” terms *memoria* and *reminiscentia*. In the *versio vulgata* I have found only 3 occurrences of *memoria* (ed. Shields 1949: 58, 71).

<sup>68</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 48.

<sup>69</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 49: “Rememoratio igitur est cognitio eius quod fuit cognitum, postquam cognitio eius fuit abscisa. Investigare autem per rememorationem est acquisitio cognitionis, et laborare et facere cogitativam laborantem in repraesentatione illius cognitionis.”

strued at least partly so as to fit the Aristotelian distinction, except for the basic feature (in accordance with Avicenna) that intentions are the objects of this faculty. However, it is evident from other passages that memory in the Latin Averroes is not just a static kind of memory. In a third analysis of *rememoratio* and *investigatio rememorativa* he says:<sup>70</sup>

Et rememoratio est formae facilis reductionis; investigatio autem rememorativa est formarum difficilis reductionis.

And remembrance is of a form that can easily be reintroduced, while a rememorative search is of forms that are difficult to reintroduce.

And Averroes then goes on to describe the easily reintroduced forms as those of much “body” (*corporalitas*) and little “spirituality” (*spiritualitas*), while forms that are difficult to reintroduce are those with little “body” and much “spirituality”.

This last analysis, apparently, makes it only a matter of degree, whether or not a particular process is *rememoratio* or *investigatio rememorativa* (or *per rememorationem*), and I shall return to this difficulty. But it is also noteworthy that Averroes is certainly describing *rememoratio* as a process. True, the *reversio* and *cognitio* descriptions of the first two definitions are focused on the endresult, that is, the resultant cognitive state, but the third cannot be, and Averroes also uses the broad term *actio virtutis rememorativae* which describes a process. I shall take a brief look at this latter term and the process that it describes.

The term is ambiguously introduced. Having just analysed *rememoratio* and *investigatio per rememorationem*, Averroes says that “this act belongs to the faculty that is called rememorative”,<sup>71</sup> but even though it is not immediately clear whether he refers to *rememoratio* in general or to *investigatio per rememorationem* in particular, it seems that *rememoratio* is used synonymously with *actio virtutis rememorativae* in the following passage. Furthermore, the process later described can be performed both by human beings and animals, and thus it cannot be solely the *investigatio per rememorationem*.

So, the process of *rememoratio* is the *actio virtutis rememorativae*.<sup>72</sup> This process is described and analysed as containing four elements:

<sup>70</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 66. Cf. also the similar definition *Compendium de memoria*, ed. Shields (1949), 59.

<sup>71</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 49: “Et ista actio est virtutis quae dicitur rememorativa.”

<sup>72</sup> This accords with the Arabic *al-dhikr*, which means both “memory” and “remembering”, cf. Black (1996) 162–163n5. Albertus Magnus, *Summa de homine* qu. 38, ed.

1. The image.
2. The intention of this image.
3. Making the intention internally present.
4. Linking the intention with the proper image.

All these are necessary constituents in the process.<sup>73</sup> However, since *rememoratio* has been defined as concerned with apprehending intentions (= no. 3),<sup>74</sup> the *actio virtutis rememorativae* as a whole must draw on other faculties of the soul; otherwise its act is not completed. First, sensation is needed to bring about an image. Second, an imaginative faculty is needed in order to bring forward the image that belongs to a particular intention. And third, a faculty is needed to combine the image and the intention. This faculty, it is said, is the intellect in human beings, while it is a natural capacity or instinct in animals, for which Averroes has no proper name.<sup>75</sup> When the third faculty has performed its function, the *actio virtutis rememorativae* has been completed.

However, Averroes also finds room for a storing memory. Inspired by Avicenna, he posits a five-part structure:<sup>76</sup>

1. The sensible form as existing outside the soul (*extra animam*).
2. The sensible form in the common sense (*sensus communis*).
3. The sensible form in the imaginative faculty (*virtus imaginativa*).
4. The sensible form in the distinguishing faculty (*virtus distinctiva*).<sup>77</sup>
5. The sensible form in the rememorative faculty (*virtus rememorativa*).

At each of these stages, the sensible form is found with increasing “spirituality”. No. 5, that is, memory, is obtained, when the distinguishing faculty separates the intention from the sensible image and places it there. This fifth capacity has two modes of being:<sup>78</sup> first, it can be

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Jammy (1651b), 187b describes the process as the *actus recordationis* (even though he attributes the theory to al-Farabi instead of Averroes), but he explicitly states that “reason” (*ratio*) is not (necessarily?) involved.

<sup>73</sup> Cf. Averroes, *Compendium de memoria*, ed. Shields (1949), 51–52.

<sup>74</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 60.

<sup>75</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 52. But, according to Averroes, this faculty was called *existimatio* (*versio vulgata*) or *aestimatio* (*versio Parisina*) by Avicenna. Black (1996) 164 argues that Averroes “implicitly eliminates *aestimatio* from his theory”. See also Gätje (1964b) 62–63.

<sup>76</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 58–59.

<sup>77</sup> There are some uncertainties in the commentary as to the precise definition of this distinguishing faculty, but I will not go further into these.

<sup>78</sup> Cf. Averroes, *Compendium de memoria*, ed. Shields (1949), 48–49, 55, 59–60.

viewed as a continuously preserving faculty, and in this case it is termed “preserving” (*conservans*); however, it can also be seen as non-continuous, that is, a faculty that somehow has the intention stored, but it has been forgotten, and then it takes an effort to make the intention present. The latter seems, then, to be a kind of dispositional memory, including disposition and activation. This, Averroes says, is remembrance (*rememoratio*). Still, he explicitly says that *conservans* and *rememoratio* constitute a single faculty but with different modes of activity.<sup>79</sup> So, the rememorative faculty stores and activates intentions, which are the essential parts of the sensible form obtained, and the faculty is dependent on other faculties in both respects.

In this way Averroes has elaborated substantially both on the Aristotelian theory of memory and on the Avicennian. He has found room for both retention, disposition and activation in the theory, he has included Avicenna’s notion of intentions as the primary objects of memory, and *investigare per rememorationem* can also be placed in the scheme: While *rememoratio* (in what appears to be the primary sense) is the immediate cognition (*cognitio*) of an intention that was apprehended in the past and then forgotten or discontinued, *investigare per rememorationem* is the acquisition of cognition (*acquisitio cognitionis*), that is, the more difficult process whereby a person by an act of will works with his mind in order to internally represent the relevant objects. But note also that Averroes has, in a sense, kept the narrow Aristotelian theory which describes memory as a state. Averroes explicitly says that the faculty (*virtus*) which makes the image arise in the soul cannot be the same as the faculty that apprehends the intention;<sup>80</sup> and the apprehending of the intention is done by the conserving capacity (when the state has been continuously present) or the “rememorative” faculty (when the state has *not* been continuously present). And besides the simple apprehending of the intention there is further the judging of the intention, that is, the judgment that a particular intention belongs to a particular image, and this judgment is performed by the intellect in man and by “something similar to intellect” (*simile intellectui*) in the animals that have the capacity to remember. This distinction answers to the Avicen-

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<sup>79</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 49: “Ista igitur virtus est una in subiecto et duae secundum modum” = “This faculty, then, is one in subject and two as regards the mode.”

<sup>80</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 52–53.

nian distinction presented above, and in fact Averroes makes an explicit reference to Avicenna.<sup>81</sup>

However, bringing back an intention that was previously obtained but later forgotten or discontinued is not basically anything like Aristotle's theory of remembering. In particular, I will single out two difficulties in Averroes' interpretation: (1) the action of the rememorative faculty in the four-stage process somehow comprises both images and intentions; (2) *rememoratio* and *investigatio per rememorationem* do not correspond to Aristotelian memory and recollection. Both problems involve the ambiguity of the term *rememoratio*, and thus they are essentially problems for the Latin schoolmen, not necessarily to the same degree for the Arabic thinkers.

Concerning no. 1, the Averroean theory was certainly confusing to some Latin interpreters (e.g. Albert the Great), who thought that the Arabics held that memory contains both images and intentions. For, although both Avicenna and Averroes explicitly say that the objects of memory (*memoria* or *rememoratio*) are intentions, the latter's analysis of the act of the rememorative faculty (*actio virtutis rememorative*, which is sometimes inappropriately called *rememoratio*) shows that the imaginative faculty is not only needed in the process but images are even part of the final result of the act, *viz.* the combination of image and intention. So, the broad and unclear use of *rememoratio* causes difficulties of interpretation at this level.

Concerning no. 2, the content of *rememoratio* is made even further unclear because of the relationship with *investigatio per rememorationem* that Averroes postulates. First Averroes must take account of the fact that according to Aristotle, with whom he agrees, many animals have *rememoratio*, but only human beings have the possibility of *investigatio per rememorationem*.<sup>82</sup> However, these two processes are not in the Latin Averroes entirely different, and he does not interpret Aristotle's theories of memory and recollection as comprising two completely different capabilities. The problem involved in reconciling these two views is solved by stating that *rememoratio* and *investigatio per rememorationem* only differ at the stage at which images and intentions are combined; for in human beings this is done by the intellect, while animals combine them

<sup>81</sup> In the *versio vulgata* the reference is to Avicenna in general, but in the *versio Parisina* the reference is explicitly made to the *Liber de anima*, book II.

<sup>82</sup> Arist., *Mem.* 453a8–10; Averroes, *Compendium de memoria*, ed. Shields (1949), 48, 52–53.



by natural instinct.<sup>83</sup> So, if the process runs smoothly and without any problems, it is *rememoratio*, and both humans and animals are capable of performing it. But when a particular intention is not easily obtained, then animals have no way of obtaining it; in fact, they do not know that they cannot obtain it. Human beings, on the other hand, have the power of will and the intellect, and therefore they are able to conduct a search for the intention that will (perhaps) eventually lead to the desired result.

This Averroean analysis fits the translation *rememoratio*, but it does not seem to fit Aristotle's theories. Instead, the Latin Averroes' theory amounts, I believe, to a somewhat confusing use of *rememoratio*. It is explicitly stated several times that *rememoratio* is of intentions, but it appears that a much broader usage is also acceptable, and the term has even conquered some of the conceptual territory otherwise occupied by recollection or *investigatio per rememorationem*.

At least one of the reasons for the duplicity in Averroes' use of the concept of memory (apart from the difficulties of translation) may be the following: He has correctly seen that the Aristotelian theory does not provide a description of the process, that is, how to obtain the state of remembering, unless recollection is given such a function, and this cannot be unconditionally true, since animals also have memories. If *rememoratio* is the cognitive state, then the process of reaching this state must be the work of the *virtus rememorativa*, and the Aristotelian distinctions between memory and imagination were not sufficiently explicit to account for this process. So, Averroes specified the process on Avicennian lines as including images and intentions, but this, apparently, gave rise to a broader kind of memory, since the result of a process that ends up combining image and intention cannot be said to include only intentions as the object. Therefore, it would seem that in a particular sense *rememoratio* also covers the having of images and intentions, even though the term is never explicitly so defined by the Latin Averroes. So, this was the interpretation of Aristotle that the Latin thinkers inherited, and thus it is fair to say that they were faced with two very difficult theories of memory and recollection to be used as the foundation of their own theories, *viz.* Aristotle's and Averroes', not to mention Avicenna's more general and comprehensive account of the philosophy of mind.

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<sup>83</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 52–53.

## Janet Coleman on Averroes

Before proceeding to the Latin tradition, a brief discussion of Janet Coleman's views on Averroes' *Compendium de memoria* is in order. These are set forth in her *Ancient and Medieval Memories*.<sup>84</sup> Even though my interpretation is in large parts inspired by her work, our disagreements are fundamental ones, and in light of the limited amount of studies of this particular subject, it seems only proper to spell out my reasons for rejecting her interpretation.<sup>85</sup>

I will single out three points of disagreement between my interpretation of Averroes and Coleman's:

1. The use of "remembrance" (*rememoratio*), as regards non-human animals.
2. The use of the term *memoratio* in Averroes.
3. Averroes's epitome considered as an interpretation of Aristotle's *De memoria*.

No. 1 is the crucial difference, and the treatment of nos. 2 and 3 cannot be separated from the treatment of no. 1.

Remembrance, Coleman says,<sup>86</sup> is found only in human beings, not in other animals. It is a kind of recall, appropriate to man alone, and Averroes, according to her, makes a distinction between "remembrance" and "memory" (*memoratio*). Thus, Coleman claims that when Averroes talks about remembrance or "the *rememorativa*'s power" he is clearly discussing "the reminiscent capacity of which Aristotle spoke".

This is a very difficult interpretation for several reasons, but the most important objection is that it is explicitly contradicted by the text. Thus, in the description of the four elements in the process of remembrance,<sup>87</sup> Averroes explicitly attributes a rememorative capacity to non-human animals and also says that they are capable of "rememorating" (*rememorant* = "recalling" according to Coleman, "remembering" according to my interpretation).<sup>88</sup> Therefore, remembrance is not an exclusively

<sup>84</sup> Coleman (1992) 401–415.

<sup>85</sup> The interpretation of Averroes' theory that I have proposed is more in line with Black (1996), although we too differ as regards some of the issues.

<sup>86</sup> Coleman (1992) 402–403, 414.

<sup>87</sup> See the analysis of Averroes' theory above.

<sup>88</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 52–53: "Et in *animalibus rememorativis* est simile intellectui: Ista enim virtus est in homine per cognitionem, et ideo investigat per rememorationem. In aliis autem est natura, et ideo *rememorant animalia*,

human faculty. This conclusion is, I believe, born out also by the rest of the text.<sup>89</sup> On the other hand, Coleman is right that Averroes' theory of remembrance is not very similar to the Aristotelian theory of memory. The reason for this is not, however, that remembrance is similar to Aristotle's recollection instead, but rather that Averroes' conception of memory (*rememoratio*) is significantly broader than the Aristotelian one and comprises such different features as retention, disposition, process and actual cognition, much like a modern conception of memory.

Coleman may claim the support of Albert the Great. In his *Summa de homine* in the section on recollection, he explicitly names Gregory of Nyssa and John of Damascus (the theory found being actually that of Nemesius of Emesa) as thinkers who used *rememoratio* for *reminiscentia*;<sup>90</sup> Averroes is not mentioned here, but Albert has already previously solved a problem concerning the act of memory by stating that al-Farabi (almost certainly a mistake for Averroes) sometimes used *rememoratio* for *reminiscentia*, and there are even some passages in the paraphrase of the *De memoria*, in which *rememorari* and *reminisci* may be synonymous.<sup>91</sup> As I will proceed to show, Albert himself operates with a rather confused, and certainly a broad, conception of memory, in which recollection is often conceived as a kind of memory. Therefore, he is not the best witness in deciding these matters. Furthermore, his terminology is somewhat confused concerning memory and recollection. Thus, in his paraphrase of the *De memoria* Albert frequently uses the Averroean term *rememorari* for "remember",<sup>92</sup> and still in the paraphrase he also

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sed non investigant per rememorationem." = "And in *rememorative animals* [the faculty] is one similar to the intellect: For in man this power is something that he has through cognition, and therefore he can search through remembrance. But other animals have this power by nature, and therefore *animals have remembrance*, but they do not search through remembrance." (My emphasis). Coleman (1992) 405 cites this passage, but does not comment on the apparent contradiction of her view. My interpretation seems to be in accordance with that of Black (1996), cf. in particular her pp. 162–163n5, and with White & Macierowski (2005) 174–175.

<sup>89</sup> Cf. e.g. Averroes, *Compendium de memoria*, ed. Shields (1949), 55, comparing *virtus rememorativa* and *virtus imaginativa* with a direct reference to Aristotle, which can only be to chapter 1 (on memory) of the *De memoria*, since imagination (*φαντασία*) is not mentioned in chapter 2 (on recollection).

<sup>90</sup> Albertus Magnus, *Summa de homine* qu. 39, ed. Jammy (1651b), 191a.

<sup>91</sup> Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 191a; Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 58b, 59b.

<sup>92</sup> See e.g. Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 55a (paraphrase of *Mem.* 450a25–27): "Quaeret enim aliquis propter quam causam *rememoramur* rem absentem quae non est praesens, ..." = "For one might ask why we *remember* the absent

says that Averroes and others defined recollection as “an investigation for the forgotten through memory”, which is in accordance with my interpretation of Averroes above;<sup>93</sup> that is, Albert has correctly identified “search ... through memory” as the phrase that signifies recollection in Averroes’ interpretation. It seems, therefore, that Albert does, at least sometimes, in the paraphrase of the *De memoria* use the relevant terms (*rememoratio* and *investigatio per rememorationem/memoriam*) in accordance with Averroes’ usage.

Another difficulty for Coleman concerns point no. 2 above, *viz.* the use of the term *memoratio*. For Coleman’s interpretation of *rememoratio* also suffers from the fact that there is very little discussion of memory in Averroes, if *rememoratio* covers a kind of recall (in the sense of Aristotle’s ἀνάμνησις), not memory. I have noted only one occurrence of *memoratio* in the part of the *Epitome of the Parva naturalia* (*versio vulgata*) that is concerned with memory, and here it is used to make a distinction between what is signified by *memoratio* and “search through remembrance”.<sup>94</sup> This indicates that *memoratio* is here to be taken in the sense of “rememoratio”, and such an interpretation is supported by the fact that the single occurrence of *memorans* is found in a passage concerned with the physical location of the different faculties; and in this passage it is coupled with the “preserving faculty”.<sup>95</sup> This kind of coupling has been performed several times before in the text, but always with the preserving faculty and *rememoratio* as the two subjects to be distinguished.<sup>96</sup> Thus, it seems that *memoratio* and *memorans* must be synonymous with *rememoratio* and *rememorans*.<sup>97</sup>

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thing that is not present, ...” (My emphasis.) The Aristotelian text has μνημονεύει. A similar passage is found in Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 58b, where Albert alternates between *rememorari* and *memorari*.

<sup>93</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 57a: “reminiscentia nihil aliud est nisi investigatio obliti per memoriam.” See also Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 59a, 59b, 61b, 62a, 62b.

<sup>94</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 48: “Et ideo visum est quod investigatio per rememorationem est propria homini; memoratio autem est in omnibus animalibus imaginantibus.” = “And for this reason it has been seen that search through remembrance is a proper characteristic of man; but memory is in all animals that possess imagination.”

<sup>95</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 57: “... deinde memorans et conservans in posteriori cerebri.” = “... thereafter the remembering and the preserving faculties [are found] in the back part of the brain.”

<sup>96</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 48–49, 55.

<sup>97</sup> Further evidence in Averroes, *Compendium de memoria*, ed. Shields (1949), 58, 71,

Finally, as regards no. 3 above, it will by now be obvious that I do not believe that Averroes' epitome constitutes much of an interpretation of Aristotle. However, Coleman argues<sup>98</sup> that we find in Averroes a summary of Aristotle's conclusions, based on a sensitive reading and with an original reordering and elaboration by Averroes himself. On almost any reading of Aristotle, including Coleman's own,<sup>99</sup> this is a very difficult interpretation to uphold, and combined with her reading of Averroes it becomes, I think, impossible. For, as we have just seen, according to Coleman, Aristotle's views on memory are not really treated by Averroes: Remembrance, she says, is the one important concept of his treatise, and this term is claimed to be synonymous with Aristotelian recollection.

Admittedly, *rememoratio* was a somewhat ambiguous term in Latin theories of memory,<sup>100</sup> but in the Latin Averroes it must be identical with a broad concept of *memoria*; it does not signify *reminiscentia*.

### *Latin Translations and Early Theories of Memory*

#### *The Latin Translations of the De Memoria*

In the 12th century A.D. the *De memoria* was translated into Latin from the Greek by James of Venice (= *translatio vetus*),<sup>101</sup> and James' work was in turn used as the foundation of a second translation prepared probably by William of Moerbeke in the 13th century (= *translatio nova*).<sup>102</sup>

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where *memoria* seems to be used for *rememoratio*. See also Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 185b.

<sup>98</sup> Coleman (1992) 402.

<sup>99</sup> Coleman (1992) 15–34.

<sup>100</sup> Cf. Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 185b (with reference to an earlier definition of the memorative faculty: "Memorativum est memoriae et rememorationis causa et promptuarium" = "The memorative faculty is the cause and repository of memory and remembrance"): "Quid supponatur per hoc quod dicitur 'rememorationis'? Si actus memoriae supponitur, tunc idem est ac si diceretur: 'memoria est causa actus memoriae'. Si autem per 'rememorationis' supponitur *reminiscentia*, ..." = "What is meant by 'remembrance'? If the act of memory is meant, then it is the same as if one said: 'memory is the cause of the act of memory.' But if by 'remembrance' recollection is meant, ..." See also Albertus Magnus, *Summa de homine* qu. 38 & 39, ed. Jammy (1651b), 187b, 191a.

<sup>101</sup> On James of Venice, cf. Minio-Paluello (1952); Ebbesen (1981, vol. I) 286–289; Dod (1982) 54–55, 64–68.

<sup>102</sup> On William of Moerbeke, cf. Brams & Vanhamel (1989).

These translations were to become the basis of the Latin medieval work with the text.<sup>103</sup> According to Dod, James' translation survives in 115 manuscripts and William's in 160.<sup>104</sup> Thus, even though the numbers indicate that William's translation became the standard edition of the text (as did, indeed, most of William's translations),<sup>105</sup> the number of surviving manuscripts containing James' translation is so high that one feels, *a priori*, that the translation must still have been in general use even after William's work. Most of the thinkers of the late 13th century must have used William's translation. In the first half of the century, Adam of Buckfield (?-1278/1294), Ps.-Adam of Buckfield (?) and Albertus Magnus (ca. 1200-1280) probably had no choice but to use James' translations, and even earlier John Blund quotes his translation.<sup>106</sup> More surprisingly, however, it seems that Peter of Auvergne still used it, whereas Thomas Aquinas certainly used Moerbeke's.

### *Early Theories of Memory in the Latin West*

The final Aristotelian break-through occurred in the second half of the 13th century, but of course previous thinkers had also concerned themselves with the definition of memory. I am not going to review the entire Latin tradition from Augustine until this period.<sup>107</sup> I will, however, take a brief look first at Augustine and then at some of the treatises that were produced in the 12th century and in the first half of the 13th, since these provide the immediate Latin background of the full-fledged Aristotelian theories that were to come.

In the 12th century and in the first half of the 13th century the Aristotelian writings were gradually being established as the foundation of the different sciences, and from the second half of the century they dominated the field. Avicennian influence on the theories of theologians and arts masters of the late 12th and early 13th centuries was, however, immense and in natural philosophy it seems initially to have

<sup>103</sup> On the Latin translations, cf. the Introduction to my Greek text above.

<sup>104</sup> Dod (1982) 76. Ana Palanciuc tells me that she has to date (August 2005) collected evidence for 120 manuscripts containing James' translation, of which one is lost, two are very fragmentary and two are somewhat contaminated.

<sup>105</sup> Note, however, that this is not true for the logical writings. Here William's translation did not replace the earlier translations, but in the psychological writings his translations became the standard editions.

<sup>106</sup> Cf. Johannes Blund, *Tractatus de anima* §275, ed. Callus & Hunt (1970), 74. The quotation is, however, somewhat lax.

<sup>107</sup> For the theories of memory of this period, cf. Coleman (1992) 80-324.

eclipsed that of Aristotle, even though the translations of Aristotle's *De anima* and of Avicenna's *Liber de anima* were made at approximately the same time. Aristotle's name probably always held the highest authority, but Avicenna was initially his equal in the influence that he exercised on medieval philosophy of mind.

The strong influence of Avicenna is seen, for instance, in the psychological writings of Dominicus Gundissalinus, one of the translators of Avicenna's *Liber de anima*, and in John Blund (ca. 1175–1248). When Aristotle's philosophy came to be better understood, not least through the commentaries of Averroes, attitudes gradually changed. This can be seen, for instance, in two anonymous treatises from the beginning of the 13th century.<sup>108</sup> First, I will, however, briefly examine a central aspect of Augustine's theory of memory, which was to have some influence on the later Latin thinkers.

#### A Note on Augustine (354–430)

The literature on Augustine is substantial, and his theory of memory has received its fair share of work.<sup>109</sup> He was, of course, a major authority in the Latin west, and therefore his views on memory are important, not least because they are at some points in clear opposition to the theory found in Aristotle. The Augustinian views on memory, much inspired by the Neo-Platonists and set forth in the *Confessions* and the *De trinitate*, are complex, and I will only treat (very briefly) a single part of the theory: the theory of intellectual memory.

First, it must, however, be noticed that, according to Augustine, the basic feature of memory is retention. The section in the *Confessions* on memory describes at the very beginning how Augustine walks “into the fields and spacious palace halls of memory” (*in campos et lata praetoria memoriae*), and he further describes these halls as “the storage places of innumerable images” (*thesauri innumerabilium imaginum*).<sup>110</sup> Thus, retention is a general feature of all memory, but it should perhaps be noted that this description by Augustine is much indebted to the con-

<sup>108</sup> On the different psychological views of the late 12th and early 13th centuries, cf. Hasse (2000) 13–60.

<sup>109</sup> Cf. Coleman (1992) 80–111. There is also a brief and lucid exposition of Augustine's theory of memory in O'Daly (1997) 411–415 with bibliography (his p. 427).

<sup>110</sup> Augustinus, *Confessiones* X.8, ed. de Labriolle (1950–1954, vol. II), 248.

ception of memory found in treatises concerned with rhetoric rather than with philosophy.

*Confessions* X.8–21 contains a description, in a somewhat poetic and difficult style, of Augustine's views on memory and its various kinds. He starts out by analysing memory of sensible objects, but having treated this, he moves on to intellectual memory.<sup>111</sup> In this particular passage, then, Augustine makes a firm distinction between the memory that stores an image of the object, and the memory that stores the object itself. The former is of sensible objects, the latter of intellectual objects. And furthermore, having made this distinction, Augustine considers it obvious that (at least this latter kind of) memory must then belong to mind, not to the sensing faculties.

In the *De trinitate* memory is still firmly placed in the mind; in fact, it is part of a triad consisting of memory, intelligence (or understanding) and will (*memoria, intelligentia, voluntas*). However, Augustine explicitly states that these are not really three different things but rather one and the same, and thus they are all located in a rational faculty.<sup>112</sup> As we shall see, the fact that memory was thus categorised became very influential in later Latin authors.

#### Dominicus Gundissalinus (12th century)

The major philosophical influence on Dominicus Gundissalinus was Avicenna from whom his treatise contains substantial borrowings;<sup>113</sup> the most famous passage is probably the argument about the floating man,<sup>114</sup> but examples are *legio*. And even in the passage concerned with Aristotle's definition of the soul the Avicennian interpretation is obvious.<sup>115</sup> Gundissalinus' *Liber de anima* is the work of a theologian, who supports his faith by using the philosophers.<sup>116</sup> This use of philosophers is seen already in the first chapter. Gundissalinus says that quite a few

<sup>111</sup> Augustinus, *Confessiones* X.8, ed. de Labriolle (1950–1954, vol. II), 251–252.

<sup>112</sup> Augustinus, *De trinitate* X.11–12, ed. Mountain (1968, vol. XVI.1), 329–332.

<sup>113</sup> Note, however, that Plato and Aristotle are called “the first among the philosophers” (*philosophorum principes*), Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 37.

<sup>114</sup> Avicenna, *Liber de anima* I.1, ed. van Riet (1968–1972, vol. I), 36–37; Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 37.

<sup>115</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 40–42.

<sup>116</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 31: “Quapropter quicquid de anima apud philosophos rationabiliter dictum inveni, simul in unum colligere curavi.” = “For this reason [*scil.* because of the uncertainties surrounding the



people have gone so far as to trust only their senses with the result that they deny the existence of the soul and, even worse, the existence of God. To illustrate such views he quotes some biblical passages and then adds:<sup>117</sup>

Quapropter rationes quibus philosophi animam esse deprehenderunt apponere necessarium duxi.

Therefore, I thought it necessary to relate the arguments, by which the philosophers have proved the existence of the soul.

That is, the best way to convince the heretic fools is through rational (philosophical) arguments. This is the overall purpose of Gundissalinus' treatise: to use rational arguments to establish the truths about the soul, and the treatise is a compilation of philosophical arguments rather than the author's own theories.<sup>118</sup>

The section on the faculties of the non-rational soul takes up a substantial part of Gundissalinus' treatise.<sup>119</sup> On the internal faculties, he initially sets forth the Avicennian theory of forms and intentions of the sensible objects, and then goes on to provide an almost literal quotation of Avicenna's illustration of the wolf and the sheep cited above.<sup>120</sup> Except for some (understandable) confusion between *imaginativa* and *imaginatio*, the order of which has been reversed in Gundissalinus, he follows Avicenna closely also in the enumeration and definition of the five internal senses. As regards the memorative faculty, he similarly follows Avicenna in calling it *vis memorialis sive reminiscibilis*,<sup>121</sup> and in making it the storing place of intentions, also said to be the storing place of the intellect (*Thesaurus enim intellectus memoria est quae retinet intentionem*), which is, I think, the one major un-Avicennian part of the theory.<sup>122</sup> However, in the latter passage he is very clear that this is not the only

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soul] I have endeavoured to collect together in one treatise, whatever I have found to be reasonably said by the philosophers about the soul."

<sup>117</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 32.

<sup>118</sup> Although it must be admitted that Gundissalinus sometimes uses what is rather a blend of theological and philosophical arguments, cf. e.g. *Liber de anima*, ed. Muckle (1940), 43.

<sup>119</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 64–83. It is followed by a section on the rational soul.

<sup>120</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 71. Cf. Avicenna, *Liber de anima* I.5, ed. van Riet (1968–1972, vol. I), 86.

<sup>121</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 71.

<sup>122</sup> See Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 74. Avicenna did not attribute any kind of memory to the intellect itself.

function that memory has.<sup>123</sup> For there is also the function of helping in recollecting, which Avicenna hinted at.<sup>124</sup> And again like Avicenna, it is also said that these actions may be performed by the estimative faculty, which can be claimed to have a memorative capacity.<sup>125</sup> Still, like all other Peripatetics, he upholds (nominally) a basic distinction between memory and recollection, and he is very explicit that the latter belongs to a rational faculty.<sup>126</sup>

Only at the very end of his treatise does Gundissalinus depart from Avicenna's theory of the non-rational soul. For here he says that memory, as the only non-rational faculty, survives the bodily death of a human being.<sup>127</sup> The reason for this remark is theological; for even though this topic was also discussed by some ancient authors,<sup>128</sup> it obviously has an immense importance for Christian thinkers. This part of Gundissalinus' theory is not discussed by the philosophers immediately following him,<sup>129</sup> and (perhaps wisely) he does not himself attempt to fit this doctrine with his overall theory. The problem of memory *post mortem* was later discussed much more thoroughly by Duns Scotus.<sup>130</sup>

It can be said, then, that only in theological matters has Gundissalinus knowingly departed from Avicennian doctrine, as regards the non-rational soul, but it is also important to note that he has picked up the Avicennian hint at an active kind of memory, even though both he and Avicenna regard memory as primarily retentive.

<sup>123</sup> Although he elsewhere says that a "storing place" (*thesaurus*) can only retain, not apprehend, cf. Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 94.

<sup>124</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 74: "Sed vocatur [*scil.* virtus memorialis] retentiva ob hoc quia id quod est in ea firmiter haeret, et vocatur memorialis propter velocitatem suae aptitudinis ad recordandum per quod formatur cum rememorat post oblivionem." See further Gundissalinus, *Liber de anima*, ed. Muckle (1940), 78, where he talks about memory proceeding to its mode of a searching movement, which is (confusingly) attributed to the imaginative faculty (*procedit memoria ad modum motus inquisitionis, quae est in natura virtutis imaginativae*). This is a broad concept of memory. Cf. also the section on Avicenna above.

<sup>125</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 75.

<sup>126</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 79.

<sup>127</sup> Dominicus Gundissalinus, *Liber de anima*, ed. Muckle (1940), 103.

<sup>128</sup> Cf. e.g. Plot. IV.3.25.

<sup>129</sup> And Gundissalinus was certainly known, and referred to, by later thinkers, cf. e.g. Anonymus, *De anima et de potentiis eius* ll. 42–44, ed. Gauthier (1982) 29.

<sup>130</sup> See the section on Scotus below.

John Blund (ca. 1175–1248)

John Blund was an arts master when he wrote the *Tractatus de anima* (ca. 1200). He quotes few theological sources and many philosophical, and he does not include extensive discussions of theological subjects, as did Gundissalinus.

A cursory reading of John Blund's *Tractatus* seems to establish that he regarded Aristotle as the supreme authority, and other philosophers, including Avicenna, as commentators on the Philosopher. The true nature of Blund's work turns out, however, to be somewhat different, and the issue is complex. For instance, in discussing the existence of the common sense (*sensus communis*),<sup>131</sup> Blund starts by referring to two authorities: Augustine and Avicenna. One might think that this is because Aristotle is not very clear on the common sense, but in the *olutio* part Blund again invokes authorities, and this time he claims that the conclusion is true "according to Aristotle in his book *On the Soul* and according to other philosophers."<sup>132</sup> So, at the very least, Avicenna seems to be an authority not too much below Aristotle, and another fact about the *Tractatus* is even more important: the treatise seems much closer to Avicenna's *Liber de anima* than to Aristotle's *De anima*.<sup>133</sup> In particular, one must note the highly technical descriptions of the physiology of e.g. the nature and position of the sense organs,<sup>134</sup> descriptions that are not found in Aristotle, and even more revealing is the treatment of the internal senses, which is an Avicennian characteristic.<sup>135</sup> Therefore, Blund is in many ways a natural continuator of Gundissalinus and his Avicennian tradition. However, Blund does not blindly follow his Arabic predecessor, and he has some very interesting thoughts on this Avicennian theory from a Latin philosopher's point of view. I will review the most relevant discussion found in the *Tractatus*: the relationship between *imaginatio* and *memoria*.

Blund generally does not pay much attention to *intentiones*. In fact, the section on estimation (§§ 254–261) is the only part of the treatise in

<sup>131</sup> Johannes Blund, *Tractatus de anima* §§ 232–249, ed. Callus & Hunt (1970), 62–67.

<sup>132</sup> Johannes Blund, *Tractatus de anima* § 245, ed. Callus & Hunt (1970), 65: "Solutio. Dicendum est secundum Aristotelem in libro De anima, et secundum alios philosophos, sensum communem esse." In the apparatus, Callus and Hunt reasonably refer to Blund's earlier statements about Augustine and Avicenna.

<sup>133</sup> So also Spruit (1994) 117.

<sup>134</sup> Johannes Blund, *Tractatus de anima* §§ 89–231, ed. Callus & Hunt (1970), 24–62.

<sup>135</sup> Johannes Blund, *Tractatus de anima* §§ 232–275, ed. Callus & Hunt (1970), 62–74.

which intentions figure prominently. But since Blund generally accepts the Arabic theory of internal senses, albeit with some alterations, this lack of distinction between intentions and images made it difficult for him to distinguish *imaginatio* (which, as we have seen, was used by Avicenna to signify the faculty that retains images) and *memoria* from each other. Blund writes:<sup>136</sup>

Sed videtur secundum hoc posse ostendi quod imaginatio sit idem quod memoria, vel quod frustra sit imaginatio animali data. Quoniam per memoriam potest idem apprehendi, et eodem modo quod apprehenditur per imaginationem. Quoniam imaginatio apprehendit res prius existentes in sensu, et memoriae est memorari praeteritorum; et ita memoriae est apprehendere res secundum quod ipsae prius fuerunt existentes in sensu. Vel ergo imaginatio est idem quod memoria, vel inanis est imaginatio, quod constat esse falsum; nihil enim sine causa quod est a Creatore rebus est insitum.

But it seems that one can show, in accordance with this, that “*imaginatio*” is the same as memory, or that “*imaginatio*” has been given pointlessly to the animal. For the same can be apprehended by memory, and in the same way in which it is apprehended by “*imaginatio*”. For “*imaginatio*” apprehends things that were previously in the sense, and it is the function of memory to remember past objects; and so it is the function of memory to apprehend things in so far as they were previously in the sense. Therefore, either “*imaginatio*” is the same as memory, or it is an empty word, which is certainly false; for the Creator has placed nothing in the things without a reason.

It was easy for Avicenna and Averroes to distinguish *imaginatio* from *memoria*, but in a Latin tradition where images are regular objects of *memoria*<sup>137</sup> the theory causes difficulties. Blund solves the problem by pointing out that the two faculties do apprehend the same objects (= *res prius existentes in sensu*), but there is a further operation in memory, *viz.* the recollection (!, *recordatio*) that the objects were apprehended in the

<sup>136</sup> Johannes Blund, *Tractatus de anima* §251, ed. Callus & Hunt (1970), 67–68. A similar problem is still found in some of Albert the Great's discussions, cf. e.g. Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 247b.

<sup>137</sup> Cf. Augustinus, *Confessiones* X.8, ed. de Labriolle (1950–1954, vol. II), 248: “et venio in campos et lata praetoria memoriae, *ubi sunt thesauri innumerabilium imaginum* de cuiuscumodi rebus sensis invectarum.” (my emphasis) = “and I walk into the fields and spacious palace halls of memory, *where are found the storage places of innumerable images* that have been brought into these by the senses from things of many different kind.” (my emphasis). This chapter of the *Confessions* contains much information about Augustine's views on memory (cf. also the note by de Labriolle *ad loc.* and my section on Augustine above).

past. This operation is lacking in *imaginatio*, which apprehends only the object as represented by an image in the faculty.<sup>138</sup>

Blund's interpretation walks a fine line between obvious violations of either Arabic or Aristotelian doctrines. The foundation of both theory and solution is Avicennian,<sup>139</sup> but it seems that Avicenna only meant the operation of combining to apply to estimation (which can however, as we have seen, be described as a memorative faculty), whereas Blund applies it also to memory; he explicitly mentions estimation and memory as examples of faculties that both apprehend and operate.<sup>140</sup> It might seem that Blund's theory is, in fact, a clever interpretation of Aristotle's theory: *Imaginatio* and *memoria* apprehend the same object, but there is a further element in *memoria*, viz. recalling that the objects were sensed in the past. The problem with this idea, and the feature which shows that Blund is still following Avicennian doctrines, is that this further element (*operatio* = exercise) is a *recordatio*, and this term is usually synonymous with *reminiscentia*.<sup>141</sup> In defense of Blund it must be said that he does in fact prefer forms of *reminisci* when discussing recollection, but still the act involved in *recordatio* can hardly correspond to the *modus spectandi* that Aristotle described.

To sum up, Blund's main source in the philosophy of mind is Avicenna's *Liber de anima*. However, he knows his Aristotle well, and he has read widely in the texts.<sup>142</sup> In fact, in view of his frequently quoting Avicenna as *Commentator* and the *Liber de anima* as *commentum*, it is likely that Blund did actually think of himself as commenting on Aristotle with the use of the best available commentator: Avicenna. Still, the resulting theory makes Avicenna's theories much more prominent

<sup>138</sup> Johannes Blund, *Tractatus de anima* §252, ed. Callus & Hunt (1970), 68: "Per memoriam enim fit apprehensio rerum et recordatio quod prius eadem res fuerunt apprehensae; unde in ipsa recordatione est compositio. Per vim autem imaginativam apprehenditur solummodo res cuius imago describitur in subiecto illius virtutis, ..." = "For through memory there is apprehension of things and recollection that these very things were previously apprehended; and so there is composition in this recollection. But through the imaginative power only a thing, the image of which is described in the subject of this faculty, is apprehended."

<sup>139</sup> Cf. Avicenna, *Liber de anima* I.5, ed. van Riet (1968–1972, vol. I), 85–87.

<sup>140</sup> Johannes Blund, *Tractatus de anima* §252, ed. Callus & Hunt (1970), 68.

<sup>141</sup> Cf. Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 58a: "... reliquum est dicere nunc de reminiscencia quae alio nomine ab aliis Philosophis recordatio vocatur." = "... it now remains to talk about *reminiscentia*, which some other philosophers call *recordatio*, using another term."

<sup>142</sup> Cf. the *index auctorum* in Callus & Hunt (1970) 116–117.

than one would have expected from one whose purpose was to be used as a commentator on an authoritative text.

### Two Early Anonymous Treatises on the Soul (ca. 1225 and 1230)

From the early part of the 13th century we possess some interesting anonymous treatises on the soul, which also treat the internal senses and *eo ipso* memory. Furthermore, they form part of the same tradition that was soon afterwards exploited by such thinkers as Philip the Chancellor and John of La Rochelle, and thus they are not only interesting in their own right but also as documents in the history of thought.<sup>143</sup>

The first anonymous treatise, *De anima et de potentiis eius*, edited by R.A. Gauthier, was written ca. 1225.<sup>144</sup> Already at this date, Averroean influence is discernable, and in the important doctrine of the agent intellect the author follows Averroes, not Avicenna.<sup>145</sup> Gauthier has established that the treatise was much used when it was new, but, apparently, Thomas Aquinas was the last of the medievals to have known and used it.<sup>146</sup> It must be noted that the purpose of the author is philosophical, not theological.<sup>147</sup> This comes out already in the introduction to the work, which constitutes a comprehensive analysis of the famous definition of the soul in Aristotle's *De anima*:<sup>148</sup> "Soul is the first actuality of a physical body potentially having life."<sup>149</sup> Thus, as the very first part of his treatise, the author provides careful explanations for each of the terms involved, which is a very different procedure from that of Gundissalinus and even from that of John Blund. And, very noticeably, he concludes the section with the words: "And this is said in

<sup>143</sup> On the two treatises, cf. Callus (1952) 131–146; Gauthier (1982) 3–26.

<sup>144</sup> Anonymus, *De anima et de potentiis eius*, ed. Gauthier (1982). An English translation is found in Pasnau (2002) 9–34. On the date of the treatise, cf. Gauthier (1982) 22–24.

<sup>145</sup> Anonymus, *De anima et de potentiis eius* ll. 445–463, ed. Gauthier (1982) 51–52. See also Gauthier (1982) 17–19, 25. Note, however, that it is the influence of Averroes' commentaries on the *Metaphysics* and on the *De anima* that is clearly found, whereas influence of the *Epitome of the Parva naturalia* is more doubtful.

<sup>146</sup> Gauthier (1982) 21–22.

<sup>147</sup> I have found only three clearly theological passages, and none of them are significant to the philosophical argument. The first is even used only to establish the viability of the philosophical doctrine previously put forth, cf. Anonymus, *De anima et de potentiis eius* ll. 431–435, 486–487, 495–503 ed. Gauthier (1982), 50, 54, 55.

<sup>148</sup> *An.* 412a27–28; see also *An.* 412a28–b4.

<sup>149</sup> Cf. Anonymus, *De anima et de potentiis eius* ll. 1–52, ed. Gauthier (1982), 27–29 (Gr. ψυχὴ ἐστὶν ἐντελέχεια ἢ πρώτη σώματος φυσικοῦ δυνάμει ζωὴν ἔχοντος; Lat. transl. vet. *anima est actus primus corporis physici potentia vitam habentis*).

accordance with the exposition by Averroes.<sup>150</sup> This is an introduction composed by a philosopher, and in general Aristotle and Averroes have gained ground at the expense of Avicenna,<sup>151</sup> although there are still plenty of Avicennian elements in his treatment of the soul.<sup>152</sup>

Memory and the rest of the internal, apprehending senses are treated surprisingly briefly by the anonymous author. The description is Avicennian, but the author is much more explicit than his Arabic predecessor as regards memory:<sup>153</sup>

Quintus sensus est memoria. Haec habet se ad aestimationem sicut imaginatio ad sensum communem; recipit enim intentiones ab aestimatione et conservat eas, unde est thesaurus intentionum. Cuius etiam unus actus est, per ea quae advertit actu, memorari etiam quae prius advertit, et quantum ad hoc dicitur memorativa.

The fifth [internal] sense is memory. It is related to estimation as imagination is related to the common sense; for it receives intentions from estimation and preserves them, and thus it is the storing place of intentions. There is also one act of this sense and that is to remember also those things which it previously attended to through the things which it actually attends to [*scil.* at the present time], and in this respect it is called “memorative”.

The relatively vague language of Avicenna, Gundissalinus and, to a lesser degree, even John Blund has now been replaced with a clear statement: memory is both retentive and active. But the major difficulty here (at least from an Aristotelian point of view) is the problem that also faced Blund, *viz.* that the theory apparently conflates memory and recollection.<sup>154</sup> There is no attempt to handle this difficulty in the anonymous treatise, and (*pace* Gauthier) it is in fact unclear whether this

<sup>150</sup> Anonymus, *De anima et de potentiis eius* l. 41, ed. Gauthier (1982), 29: “Et hoc dictum est secundum expositionem Averroist.” (Two manuscripts have *Aristotelis* for *Averroist*, but that reading is clearly impossible.) See also Anonymus, *De anima et de potentiis eius* ll. 49–52, ed. Gauthier (1982), 29.

<sup>151</sup> However, for an apparent ignorance of the doctrine of Aristotle’s *De sensu*, cf. Anonymus, *De anima et de potentiis eius* ll. 274–280, ed. Gauthier (1982), 41, and Gauthier’s *apparatus fontium*. Interestingly, an explicit reference to the *De sensu* is found in the other, and almost contemporary, anonymous treatise to be treated below, cf. Anonymus, *De potentiis animae et obiectis*, ed. Callus (1952), 152.

<sup>152</sup> Some examples in the space of only a few pages: the division of the vegetative soul (ll. 170–188, ed. Gauthier, 34–35); distinction between external and internal senses (ll. 193–194 *et passim*, ed. Gauthier, 35); *spiritus* needed in perception (ll. 199–202, ed. Gauthier, 35–36); distinction between *lux* and *lumen* (ll. 223–225, ed. Gauthier, 37). See also, more generally, Gauthier’s *apparatus fontium*.

<sup>153</sup> Anonymus, *De anima et de potentiis eius* ll. 381–386, ed. Gauthier (1982), 46–47.

<sup>154</sup> Gauthier’s *apparatus fontium* (1982: 47) nicely illustrates the confusion that this

active memory is to be identified with Aristotelian recollection. After all, Averroes found room for both an active memory and recollection, even though he did this by eliminating some of the differences.<sup>155</sup> One might speculate that the author had perhaps seen the Commentator not only on the *De anima* and the *Metaphysics* but also his *Epitome of the Parva naturalia*, although this is still uncertain.

The other anonymous work, *De potentiis animae et obiectis*, edited by D.A. Callus, was written by a theologian only a few years later (ca. 1230) than the *De anima et de potentiis eius*,<sup>156</sup> and it depends to some extent on the latter.<sup>157</sup> The author's theological point of view is demonstrated by several facts; for instance, the much more frequent theological arguments compared to e.g. the *De anima et de potentiis eius*, and, I think, by the attention he gives to the specifically human faculty to the detriment of the others. Thus, he explicitly does not want to treat the vegetative soul,<sup>158</sup> and he also states that sense is merely for the sake of providing the rational soul with the material to work.<sup>159</sup> Another obvious difference between the two treatises is the still declining influence of Avicenna. This is very clear in the author's treatment of memory and the other internal senses, which is, as in the former instance, very brief but with some conspicuous features.<sup>160</sup> First, *fantasia*, which earlier authors, following Avicenna, used as synonymous with the common sense, has been given the more Aristotelian role of combining and dividing images, that is, the role that the imaginative faculty (*imaginativa*) had in Avicenna.<sup>161</sup> However, even more conspicuously, memory is no longer the preservation of intentions but instead the preservation of sensible images (*fantasmata sensibilia*), while the intentions are linked

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definition produces in terminology. He also notes that the terms *memorari* and *memorativa* for this active memory is, apparently, not found in the earlier tradition.

<sup>155</sup> See the section on Averroes above.

<sup>156</sup> Anonymus, *De potentiis animae et obiectis*, ed. Callus (1952). For arguments concerning the date, cf. Callus (1952) 138–146; Gauthier (1982) 22–23. In one of the three extant manuscripts the treatise is ascribed to William of Auvergne, but Callus rejects this ascription due to considerations of method, style, language and doctrine.

<sup>157</sup> Cf. Gauthier (1982) 6–19.

<sup>158</sup> Anonymus, *De potentiis animae et obiectis*, ed. Callus (1952), 147.

<sup>159</sup> Anonymus, *De potentiis animae et obiectis*, ed. Callus (1952), 151: "Sensus est principium cognoscendi res sensibiles ita quod earum natura possit cognosci apud rationem et intellectum." = "Sense is the principle by which one cognises sensible things in order that their nature can be cognised by reason and the intellect."

<sup>160</sup> Anonymus, *De potentiis animae et obiectis*, ed. Callus (1952), 154–155.

<sup>161</sup> It is, however, still called *imaginativa* when it is active in sleep, cf. Anonymus, *De potentiis animae et obiectis*, ed. Callus (1952), 154.



rather with estimation.<sup>162</sup> For whereas Avicenna and e.g. the author of *De anima et de potentiis eius* had made memory the final stage in the analysis of the internal senses, our author places memory before estimation. This seems to me to be an Averroean trait. Although Averroes refuses to designate this capacity “estimation”, he does state that this is what Avicenna called it.<sup>163</sup> Neither Callus nor Gauthier has noted the possible influence of Averroes’ epitome in the *De potentiis animae et obiectis*.

### Concluding Remarks

To sum up, it seems that Avicenna’s influence was very strong in the late 12th century, represented by Dominicus Gundissalinus. However, Aristotle rapidly gained ground, and throughout the first half of the 13th century he replaced Avicenna, both in name and in fact, as the primary authority on (philosophical) matters of the soul. As regards memory, the more Aristotelian view that focused on images rather than intentions may also have been supported by the regular Latin use of *memoria*, found, for instance, in Augustine’s *Confessions* X, Augustine being an authority who was obviously known and used.<sup>164</sup> Nevertheless, Avicenna did not simply disappear, and his influence was still strong in some later writers, notably Albert the Great.<sup>165</sup> Furthermore, the Avicennian theory of internal senses and (partly) intentions, which was accepted with modifications also by Averroes, became a standard method of viewing the soul, also in interpretations of Aristotle. Thus, Avicenna’s influence on Latin philosophy of mind was so well established that it continued, even when his *direct* influence was declining.

There were quite a few other philosophical and theological authors of the early 13th century who wrote about the soul, for instance, John of La Rochelle (?-1245) and William of Auvergne (?-1249), but the brief summaries of the treatises above provide, I think, the general picture of the philosophy of memory from this period.<sup>166</sup>

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<sup>162</sup> And apparently *intentio* is a more narrow concept to our author, since he posits only goodness (*bonitas*), badness (*malitia*), harmfulness (*nocumentum*) and helpfulness (*iuvamentum*) as examples. Intentions of the Avicennian or the Averroean kind are not found.

<sup>163</sup> Averroes, *Compendium de memoria*, ed. Shields (1949), 52–53.

<sup>164</sup> For a single example, explicit references to Augustine’s *De musica* and *De doctrina Christiana* are found in Anonymus, *De potentiis animae et obiectis*, ed. Callus (1952), 168.

<sup>165</sup> See the section on Albert the Great below.

<sup>166</sup> For more general information about these authors, cf. Spruit (1994) 109–138; Hasse (2000) 13–60.

*The Second Half of the 13th Century*

The 13th century produced a number of remarkable philosophers, and the spirit of the century was one of optimism. High-quality scientific works were being made accessible, and major breakthroughs could reasonably be expected.

The final shift in philosophical predilections from Avicenna to Aristotle with Averroes as commentator can be witnessed, for instance, in the different attitudes of Albert the Great, whose main philosophical authorities are Aristotle and Avicenna, and Thomas Aquinas, in whose writings the authority and influence of Aristotle have completely eclipsed that of Avicenna.

However, memory is a somewhat special case. Since Avicenna treats memory rather briefly as one of the internal senses, Albert too turns to Averroes' epitome rather than to Avicenna for instruction, although Aristotle himself is the prime authority. Still, Albert regards Avicenna and Averroes as basically agreeing on most of the fundamentals. However, as we shall see, the almost equal standing of Aristotle and Avicenna/Averroes as Albert's authorities has given him certain difficulties in harmonising their respective theories, though he does not really address the problem. Thomas Aquinas does ingeniously attempt to make Aristotle, Avicenna and Averroes compatible, as regards memory (and in particular as regards the Arabic theory of intentions), but he does not address the problem that Aristotle's theory of memory is much narrower than that of the Arabic philosophers.

Peter of Auvergne, the last of the major thinkers of the late 13th century to be investigated here, followed so to speak in the footsteps of Aquinas. He wrote literal commentaries on the part of the *Parva naturalia* which Aquinas had not commented on, and he was one of the first to write a question-commentary on the *De memoria*. Furthermore, this commentary on the *De memoria* also differs from the works of Albert and Aquinas by having been written, it seems, while the author was still an arts master, not yet a theologian.

*Albert the Great (ca. 1200–1280)*

Albert the Great was, for the better and for the worse, a point of reference for the later scholastics.<sup>167</sup> His vast *Opera omnia* cover the

<sup>167</sup> Due to considerations of accessibility, I have used Jammy's edition (1651a) of

*Corpus Aristotelicum* and some additions that were thought necessary to complete the Aristotelian descriptions. Furthermore, he wrote equally extensively on purely theological matters.

For his work on the *De memoria* Albert used James' translation, which is, of course, also natural (probably even necessary) on chronological grounds.<sup>168</sup> The simple proof is his use of "barber" (*tonsor*) instead of "Coriscus" as the illustrative example corresponding to Aristotle's *De memoria* 450b29–451a2.<sup>169</sup> Aristotle himself uses Κορίσκος as illustration, and the *translatio nova* correspondingly has *Coriscus*, but the *translatio vetus* has *tonsor*.<sup>170</sup>

### The Paraphrase of the De Memoria: Introductory Remarks

Albert generally proceeds by paraphrasing Aristotle. From a 21st century perspective he is thus part of a long tradition of Aristotelian paraphrases, but it must be remembered that Albert has no direct parallel in the earlier Latin tradition. In a sense he is, therefore, original in his exposition of the Aristotelian material. Furthermore, even though a tradition may be said to exist, the individual paraphrases differ, and the level of independent thought on the part of the author writing the paraphrase could vary to a great extent.

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the paraphrase of the *De memoria*. As already mentioned, Silvia Donati is currently preparing a critical edition of the text. There is a translation of the paraphrase by J.M. Ziolkowski in Carruthers & Ziolkowski (2002) 118–152. For comments on the textual tradition of the work, see also Gauthier (1985) 122\*–124\*. For the different aspects of Albert's thought, cf. in particular Weisheipl (1980a); Honnefelder & Wood & Dreyer & Aris (2005). On Albert's life and works, cf. Weisheipl (1980b). On Albert's theory of memory, cf. Yates (1966) 73–80; Coleman (1992) 416–421. See also Steneck (1980). For Albert's influence on later medieval psychological theories, cf. Park (1980).

<sup>168</sup> The paraphrase of the *De memoria* was written after the *De anima* paraphrase, to which Albert himself often refers (e.g. *Liber de memoria*, ed. Jammy (1651a), 52a, 52b, 54a, 54b, 55a *et passim*), and the latter was produced in the period 1254–1257 when he was the prior provincial of *Teutonia* (see Weisheipl 1980b: 35; Weisheipl 1980a: 568–569). On the other hand, the *De memoria* paraphrase was written before the *De intellectu et intelligibili* and the *De animalibus* (cf. *Liber de memoria*, ed. Jammy (1651a), 54b, 55a). William's translation of Aristotle's *De memoria* probably dates from ca. 1260–1270. On the dates, cf. Weisheipl (1980a) 569–570; Dod (1982) 76; Hasse (2000) 66, 67n314.

<sup>169</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1951a), 56b.

<sup>170</sup> For the *nova*, see Gauthier (1985) 112; for the *vetus*, see Avranches, Bibl. Municipale 221, f. 22<sup>v</sup>. Cf. also Weisheipl (1980a) 569. Apparently, James did not know Κορίσκος and assumed that the word was synonymous with (or a corruption of) ζουγεύς. Incidentally, this might indicate that the *De memoria* translation is one of James' earlier works. It is unlikely, I think, that ζουγεύς was actually in his Greek manuscript.

First, Albert is more independent in his handling of the material than the Greek authors; for instance, Theodoros Metochites frequently inserts the word  $\phi\eta\sigma\iota\nu$  (that is, "Aristotle says") and thus directs attention to the fact that his text is a kind of commentary. Albert, on the other hand, states facts about the subjects that he is discussing in his paraphrases; not so much because he is innovative, but rather because Aristotle was usually right and has just been badly misunderstood; and it must be admitted that Albert also often refers to the particular statements of the Philosopher. In fact, Albert says elsewhere that his own views would be stated in his theological works rather than in his works on natural philosophy,<sup>171</sup> and in a number of passages he explicitly disclaims responsibility for the content of the paraphrases.<sup>172</sup>

Still, in the *De memoria* paraphrase direct references to Aristotle do not usually occur as an argument from authority. I believe that Albert's independent mind really did play a role also in the paraphrases. The apparent procedural similarity between Albert and Avicenna has often been noticed, but it is elusive; for whereas Avicenna shows much independence from Aristotle, both in the content and in the disposition of the material, Albert is not diverting from the Aristotelian text in the disposition of the material.<sup>173</sup> In fact, the explicit purposes of the *Liber de memoria* are two: "(1) First we want to set forth plainly the view of the Peripatetics on memory, (2) before proceeding to Aristotle's own view."<sup>174</sup> The implications of this statement seem to be that two theories of memory will be presented in Albert's work, but not necessarily one to the exclusion of the other, and in fact this is exactly what happens. Albert probably intended the former to be the foundation of the latter,

<sup>171</sup> Albertus Magnus, *Liber de somno*, ed. Jammy (1651a), 103b: "Si quid enim forte propriae opinionis haberemus, in theologicis magis quam in physicis, Deo volente, a nobis proferetur." = "For if, perhaps, we had some opinions of our own, we should, God willing, put them forward in our theological works rather than in our works on natural philosophy."

<sup>172</sup> For a list of such passages, cf. Ashley (1980) 79n32.

<sup>173</sup> For the usual views on the similarity between Avicenna and Albert, cf. e.g. Ashley (1980) 79n31. For more on the differences, cf. Hasse (2000) 67.

<sup>174</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 52a: "ideo primo volumus ponere planam de memoria sententiam Peripateticorum antequam Aristotelis sententiam prosequamur." For Albert's general remarks on his method in the Aristotelian paraphrases, cf. Albertus Magnus, *Physica*, ed. Hossfeld (1987–1993, vol. IV.1), 1a–b; Albertus Magnus, *Liber de somno*, ed. Jammy (1651a), 65a.

but, as we shall see, the Peripatetic theory can hardly be viewed merely as the basis of Aristotle's, and Albert does not try to make the theories compatible.<sup>175</sup>

### The Basis of Albert's Views on Memory

The basis of Albert's views can be briefly stated as follows:<sup>176</sup> All the (contemporary) Latin authors have been wrong regarding memory and recollection, and the reason for their mistakes is the obscurity of Aristotle's phrasing (*propter verborum Aristotelis obscuritatem*). But memory is a very important concept in considering the surrounding world; for in sense perception the soul obtains the sensibles, but the reason why one wants to obtain these in the first place is that one aims at being able to reconnect with the sensible objects themselves.<sup>177</sup> In order to do this, one must retain the sensibles.

### The Peripatetics

The Latin contemporaries did not, then, according to Albert, understand Aristotle's thoughts on memory and recollection, and thus did not understand these capacities. Therefore, Albert did not, or at least not explicitly, use the works of these contemporaries. The major interpreters of Aristotle in Albert's lifetime were the Arabic and, it was thought, the Greek. In the *Liber de memoria* Albert twice refers to Peripatetics by name: in the first passage the reference includes Avicenna and Averroes,<sup>178</sup> in the second it includes Averroes, Avicenna, Alexander, Themistios and al-Farabi,<sup>179</sup> in that order of appear-

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<sup>175</sup> It should perhaps be noted that Albert finds it easier to make the Arabic theory compatible with Aristotle's regarding recollection. Cf. Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 57a–58a.

<sup>176</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 52a, 57a.

<sup>177</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 52a: "Non enim sensibilia accipit anima propter aliquid nisi ut per ipsa in res sensibiles veniat." = "For the soul does not obtain the sensibles for anything other than proceeding to the sensible things through these."

<sup>178</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 52a–53a.

<sup>179</sup> Al-Farabi, in particular, is a curious addition. In the 1240's, when Albert wrote his *Summa de homine*, he thought that the epitome commentary was the work of al-Farabi, and perhaps he is still influenced by his earlier views when he includes both Averroes and al-Farabi. An investigation of the difficulties involved is beyond the scope of the present essay. For Albert's views on the author of the epitome, cf. Gätje (1964a);

ance.<sup>180</sup> The only Latin author to whom Albert explicitly refers in the *De memoria* paraphrase is Cicero, and he is not, of course, regarded as a Peripatetic philosopher but as a provider of practical advice regarding recollective processes.<sup>181</sup>

So, Avicenna and, in particular, Averroes are the authors that Albert mainly relies on in his exposition of memory and recollection. His summary of their views is focused on Averroes, which is probably natural, since his usual favourite source, Avicenna, only treats memory briefly as part of a more elaborate plan of the soul, that is, as one of the internal senses. Albert's elaborate framework of internal senses is, however, derived equally from Avicenna and Averroes. Furthermore, Albert does not really distinguish carefully between the two Arabic philosophers in his paraphrase of the *De memoria* and seems to think that they agree with each other apart from a few terminological differences.<sup>182</sup>

According to Avicenna and Averroes, Albert claims, the exercise of memory (*memoriae operatio*)<sup>183</sup> is completed in a four-stage process:<sup>184</sup> (1) obtaining a sensible form in the common sense (*sensus communis*); (2) preservation of this form in the soul; (3) separation of intentions from the form; (4) the act of memory by recombining the form and the intentions. So, the completion, at which point remembering occurs, is found in no. 4, which means that memory comprises both forms (or figures) and intentions. This corresponds with the *actio virtutis rememorativae* analysed by Averroes.<sup>185</sup>

According to Albert, then, this four-stage active process constitutes the Peripatetics' interpretation of Aristotle's theory. But considered as a summary, Albert's exposition is not satisfactory. And furthermore, even though he explicitly describes his exposition as a summary of "the inter-

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Gauthier (1985) 111\*–113\*. Similar problems regarding al-Farabi have been conjectured to exist in Albert's paraphrase of Euclid, cf. Tummers (1980) 493.

<sup>180</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 57a–58a.

<sup>181</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 58a, 59b.

<sup>182</sup> See also Albertus Magnus, *Liber de somno*, ed. Jammy (1651a), 65a on the agreement of the Arabics regarding sleep.

<sup>183</sup> In the introduction of the problem (52a), Albert uses *operatio memoriae*, and in the conclusion (52b) he says *actus memoriae*, but in the treatment he often writes simply *memoria*. This ambiguity is inherited from Averroes (see the section on Averroes above).

<sup>184</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 52a–b.

<sup>185</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 52b: "Compleatur enim actus memoriae ex compositione horum duorum [*scil.* figurarum et intentionum]." = "For the act of memory is completed by the composition of these two objects [*viz.* figures and intentions]." See also Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 53a.

pretation by Averroes and others of Aristotle's view",<sup>186</sup> he does nothing to refute the theory or make it compatible with his own reading of Aristotle which follows; in fact, one is left with the impression that the Peripatetic might also be Albert's own view. In the concluding paragraph of the summary, he even goes on to add a point of his own, apparently in order to supplement the views of the Peripatetics.<sup>187</sup> It must also be noted that Albert regularly uses the first person plural in discussing the views of the Peripatetics, and finally Peripatetics must be expected to state correctly the Aristotelian views. Thus, Aristotle himself is described as "the first among the Peripatetics" (*princeps Peripateticorum*).<sup>188</sup>

Apparently, Albert's summary has removed the obscurity of Averroes' theory by equating *memoria* (= Averroes' *rememoratio*) simply with the *actio virtutis rememorativae*. For even though a four-stage process is also found in Averroes, albeit a slightly different one, he explicitly states several times that *rememoratio* is of intentions, not images, and in this Averroes follows the Avicennian description.<sup>189</sup> But Albert thinks that, according to the Arabic philosophers, memory in general comprises both intentions and images. He is even able to make room in the Peripatetic plan for the *conservans* and the (*re*)*memorativa* (or *memorialis*) faculties of Averroes' treatise, which, following the wording of the Commentator, are said to be essentially identical while differing in being. For *conservans* preserves both images and intentions, and *memorialis* combines these elements and thus refers to the external things.<sup>190</sup>

<sup>186</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 53a: "Quod igitur Averroes et alii dicunt esse sententiam Aristotelis, ..."

<sup>187</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 53a: "Ego autem unum puto esse addendum antequam sententiam Aristotelis prosequamur." = "However, I think that one point must be added, before proceeding to Aristotle's own view."

<sup>188</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 58a. For this reason I do not accept the terminology of Hasse (2000), who uses "Peripatetics" as a term for "Aristotelian philosophers but not Aristotle himself".

<sup>189</sup> Cf. e.g. Averroes, *Compendium de memoria*, ed. Shields, 48 (cited above in the section on Averroes' epitome).

<sup>190</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 53a: "Ex his igitur patet, quod conservativa secundum Averroem non differt a memoriali nisi secundum esse; quia conservativa conservat tam imagines quam intentiones, sed memoria componendo ista duo refertur ad res extra per ipsa." = "From these, then, it is clear that, according to Averroes, the preserving faculty does not differ from the memorative, except as regards its being; for the preserving faculty preserves both images and intentions, but memory combines these two elements and thereby refers to the external things through these." Compare Averroes, *Compendium de memoria*, ed. Shields, 48–49. See also Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 247b and, especially, 251a: "intentiones, quas

It seems, therefore, that Albert reconstructs the theory of the Arabic thinkers in accordance with their four-stage theory but does not want to blur the analysis by including the fact that the proper objects of memory are explicitly said to be intentions. This seems to be a wise decision, if their theory was intended to be used as the foundation of an Aristotelian interpretation.<sup>191</sup>

### Albert on Memory and Recollection

In his paraphrase Albert generally follows the Aristotelian disposition of the material presented. I think it is fair to say that Albert has understood the basic elements of the Aristotelian theory of memory better than most interpreters, but his exposition of memory is blurred by the fact that (1) he never refutes the Arabic philosophers, and thus he apparently presents two viable alternatives, and (2) because he insists on making memory a broader concept than the Aristotelian one, while still holding on to the narrow Aristotelian definition. I have already commented on the first point, and thus I will proceed to no. 2. It seems that Albert's theory might actually be an Aristotelian theory of the kind that many interpreters would have wanted Aristotle to set forth.

Albert restates Aristotle's definition almost verbatim: memory is a "state of having" or "disposition" (*habitus*), or an "affection" (*passio*) in the soul.<sup>192</sup> And this state is further specified by making the same distinction that Aristotle makes, *viz.* that an internal image of e.g. an animal can be viewed in different ways: either as an animal (*animal pictum*) or as an image which looks like the thing that it represents (*imago imitans id cuius est repraesentativum*).<sup>193</sup> Albert is even terminologically clearer than Aristotle. The image, he says, can have different modes (*modi*), and this, he says, means that the image is one and the same. The difference between the image present in memory and imagination

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conservat memoria, non sunt absolutae a particularium imaginibus." = "the intentions that memory preserves are not separated from the images of the particular objects."

<sup>191</sup> A minor attempt to use Aristotle in support of al-Gazali's theory (which is basically conceived as similar to Avicenna's) is, however, made elsewhere, cf. Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 187b. And see below for Aquinas' attempt.

<sup>192</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 53b, 57b.

<sup>193</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 56a. Whereas the Greek ζῷον may mean "picture", the Latin *animal* was obviously taken to mean "an animal in a painting".



is that one can consider it under the two aspects mentioned; Albert refers to these aspects as a *duplex consideratio*.<sup>194</sup> So, Albert has seen, more clearly than most interpreters, that the crucial element in memory is the *modus spectandi*, not the ontology of the image. I believe Albert's exposition to be one of the best and clearest interpretations of this crucial part of Aristotle's theory.

This, then, is the Aristotelian theory found in Albert's work, which is, in my opinion, a completely correct interpretation of *De memoria* 1. Unfortunately (from an interpretative point of view), Albert does not stop here, and there is more to his views on memory. This is particularly evident in the second part of the paraphrase, that is, in the part on recollection (*reminiscentia* or *recordatio*), but the reader is warned already at the beginning of Albert's treatment of Aristotle's theory of memory proper. There he writes:<sup>195</sup>

His habitis sententiam ponamus Aristotelis dicentes considerandum esse primo de memoria inter reliqua opera animatorum, quae communia sunt corpori et animae. Considerandum autem est etiam de actu memoriae, qui est memorari, quid est utrumque istorum, et propter quas causas sit in animatis quibusdam.

Having treated these issues [*scil.* the views of the Peripatetics], we shall now set forth Aristotle's view, saying that we must first consider "memory" among the other workings that are common to body and soul in the ensouled beings. But we must also consider the act of memory, that is, "remembering". As regards both of these, we must consider what each of them is, and the causes for their being in some ensouled beings.

In this passage Albert points to two subjects to be investigated concerning Aristotle's view: memory and the act of memory. And his reason for making this distinction is found in the Aristotelian text, *viz.* the use of both the noun and the verb in Aristotle's introduction of the subject to be treated.<sup>196</sup> Thus, Albert is one of the earliest Aristotelians in a long tradition of interpretation that explains the initial lines of the *De memoria* in this way.<sup>197</sup> I am not convinced by this interpretation, since such phrasing is a regular Aristotelian way of indicating that he means the

<sup>194</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 56b.

<sup>195</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 53a. See also Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 63b.

<sup>196</sup> Arist., *Mem.* 449b4: Περί μνήμης καὶ τοῦ μνημονεύειν ... See also 451a14–15; 453b8.

<sup>197</sup> Cf. e.g. Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 104b. The same interpretation is found also in the Greek tradition and in modern analyses. See e.g. Mich. Ephes., *In Mem.* 6.8–10; Sorabji (2004<sup>2</sup>) 64.

entire concept (that is, everything included in the word),<sup>198</sup> and furthermore I know of no passage in the *Corpus Aristotelicum* that makes such a distinction between noun and verb.<sup>199</sup> At the very least, one cannot equate the act of memory as comprised by the verb with the act of bringing forth the object; if anything, the act would have to be "being in the state of remembering". This kind of interpretation seems, however, to have had some historical significance for theories of memory. For it is probably one of the main reasons why commentators have right from the beginning searched for memory acts in Aristotle in the sense that one goes through a process from passivity to remembering. To this, the Latin thinkers added the theories of Avicenna and Averroes, who were very focused on memory acts and in fact found little room for the original Aristotelian theory of memory.

Memory, then, is analysed by Albert in accordance with the Aristotelian definition, but the analysis of the act of memory is based more specifically on an Albertian interpretation that comprises elements from Aristotle, the Arabic philosophers and, it must be assumed, the earlier Latin philosophical tradition.

One of the great merits of Albert's theory, compared to Aristotle's, is that it makes sure that memory is firmly incorporated among the faculties of the soul: its relationship with sensation and perception is highlighted, and its important function in the working of human beings is also well specified. Aristotle's analyses tend to make the different subjects of investigation appear somewhat isolated in order to distinguish them clearly from each other. Albert's position is brought out already in the introduction to the *Liber de memoria*, in which he states that the soul only receives the sensibles in order to be able to refer back to the things themselves, and therefore the perfection of the movement in sensing includes memory.<sup>200</sup> This goes far beyond the Aristotelian

<sup>198</sup> Cf. e.g. *Sens.* 436b8–10: ἀλλὰ περὶ μὲν αἰσθήσεως καὶ τοῦ αἰσθάνεσθαι, τί ἐστὶ καὶ διὰ τί συμβαίνει τοῖς ζώοις τοῦτο τὸ πάθος, εἴρηται πρότερον ἐν τοῖς περὶ ψυχῆς. = "But concerning sensation and sensing, what it is, and why this affection occurs to some animals, we have talked earlier in the discussions on the soul." Note that in all the relevant passages of the *De sensu* and the *De memoria* except one (453b8–11) Aristotle indicates that he is talking about a single concept only.

<sup>199</sup> On the contrary, *Int.* 16a19–b25 seems to say something quite different.

<sup>200</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 52a: "Tunc enim primo perfectus est motus sensibilium. Non enim sensibilia accipit anima propter aliquid nisi ut per ipsa in res sensibiles veniat." = "For only then the movement of the sensibles is complete. For the soul does not obtain the sensibles for anything other than proceeding

text, but it is a natural extension of the Arabic theories.<sup>201</sup> In fact, the Arabs knew only parts of the *Parva naturalia* and these were known as the three books *De sensu et sensato*; Aquinas also includes his commentary on the *De memoria* under the main title: *Sententia de sensu et sensato*.<sup>202</sup> And elsewhere in the paraphrase of the *Parva naturalia* Albert mentions that there were some thinkers who claimed that *De sensu et sensato* included four books.<sup>203</sup> However, Albert's emphasis on the return to the objects (*reflexio in res*) goes beyond the theories found in Avicenna's *Liber de anima* and in Averroes' epitome commentary.<sup>204</sup> For whereas Avicenna and Averroes primarily discuss what happens in the person, Albert has focused attention rather on the purpose of this action. As a matter of fact, apart from the summary of the views of the Peripatetics, Albert makes little use in the *Liber de memoria* of the innovations found in the Arabic theories, such as inner senses and intentions.

The act of memory, according to Albert, consists in actively using the objects obtained from a previous sensation or perception in order to reconnect with the things that caused this sensation or perception. On my interpretation of Aristotle's theory, this does not correspond to the verbal μνημονεύειν ("remember"), which means the having of the image with reference to the past; no act of this kind is involved here. It may look closer to μεμνήσθαι ("recall"), in the sense of τῇ μνήμῃ ἐνεργεῖν ("actualise one's memory"), about which phrases I argued (in Essay 1) that they signify the potential to move towards remembering. This seems to go well with Albert's theory, and the connection may have been furthered by James' translation of *De memoria* 449b20, in which μέμνηται is rendered *memoratur*.<sup>205</sup> However, Albert's "act of memory" does not really fit this Aristotelian theory either; for Aristotle is focusing

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to the sensible things through these." See also Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 55a–b, 56b.

<sup>201</sup> However, the original inspiration may be Cicero's *De inventione*, cf. Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 245a: "Dicit autem Tullius quod 'memoria est, per quam animus repetit ea quae fuerunt.'" = "But Tully says that 'memory is that by which the soul reobtains the things that were.'" The relevant part of the *De bono* has been translated in Carruthers (1990) 267–280.

<sup>202</sup> Although Aquinas also recognised solely the treatise nowadays known as the *De sensu* under this title, cf. e.g. Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 128a.

<sup>203</sup> Albertus Magnus, *Liber de somno*, ed. Jammy (1651a), 64a–b.

<sup>204</sup> For this *reflexio in res* theory, cf. also Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 185b, where it is explicitly attributed to Aristotle. In fact, it seems rather to be a Platonic idea, cf. *Phlb.* 35c–d.

<sup>205</sup> See Avranches, Bibl. Municipale, 221, f. 22<sup>r</sup>.

attention on the *state* in the person, not on the things. This is not only a difference in terminology or focus, since Albert explicitly includes memory in the perceptual process, and, most importantly, according to Albert, the act of memory (*actus/operatio memoriae*) is just as much “memory”, as the state of memory (*memoria*) is, but Aristotle only recognises the latter as memory proper. In this part of the theory, then, Albert is influenced in particular by the Arabic tradition.

Therefore, it seems that Albert along with his predecessors (and almost all later scholars) thought that Aristotle had to include an active memory in his general theory, and then went on to describe and analyse such a theory, using the Arabic sources and his own Latin predecessors.

Another part of the Arabic theory of memory (which would, however, naturally occur independently in the Latin tradition due to the difficulties posed by translating the relevant Greek terms into Latin) also influenced Albert: the distinction between memory and recollection which appears to be somewhat different from Aristotle's. In part two of Albert's treatise, memory is explicitly called a “continuous movement” in comparison with recollection, which is a non-continuous movement.<sup>206</sup> The interesting element here is that memory and recollection are defined in non-exclusive terms: they are, apparently, not too different from each other.<sup>207</sup> Thus, he takes over the Arabic definition of recollection as “a search for the forgotten through memory” (*investigatio obliiti per memoriam*).<sup>208</sup> The process, as described by Albert, is in accordance with remarks in Averroes.<sup>209</sup> The central part played by memory in the description, as Albert points out, has the consequence that recollection cannot belong to the rational part of the soul, which seems contrary to Aristotle's analysis in *De memoria* 2.

Incidentally, the relationship between memory and recollection is perhaps most clearly illustrated by a minor feature in Albert's account

<sup>206</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 58a.

<sup>207</sup> Cf. also Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 53a: “Considerandum est etiam posterius de ipso reminisci; quia licet coniuncta sint aliquo modo memoria et reminiscencia, tamen non omnino idem sunt.” = “We must also later consider ‘recollection’ itself; for even though memory and recollection are somehow related, they are not completely identical.” This is, apparently, intended as a paraphrase of Arist., *Mem.* 449b4–8. Furthermore, in the *De bono*, ed. Kühle et al. (1951), 245b, Albert explicitly says that *memoria* can be used in the sense of *reminiscencia*.

<sup>208</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 57a, 59a, 59b, 61b, 62a, 62b.

<sup>209</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 57a–b; and see Averroes, *Compendium de memoria*, ed. Shields (1949), 53–55.

of Aristotle's *De memoria* 452a13–16, which is an example of a recollective process. Thus, whereas Aristotle only used “recall” for the last state, that is, the state that one wants to obtain, Albert finds it perfectly reasonable to use *reminisci* of the intermediate stages, which one only uses as instruments in the process.<sup>210</sup> While Aristotle was very careful in distinguishing the intermediate stages from the final stage, reserving specific terms for each, Albert, apparently, does not see the importance of this.

Finally, memory and recollection are not analysed as being different processes: Albert mentions, approvingly, the Arabic description of memory as a nobler faculty (*dignior*) than recollection.<sup>211</sup> The reason for this is found partly in their definitions. For whereas memory is a uniform, constant movement (!), recollection is neither of these. On the contrary, many different elements are involved in the process, which furthermore proceeds in a rather jerky fashion, sometimes fast, sometimes very slowly. But regarding the nobility of memory, Albert also draws on another tradition. Thus, in his *De bono* Albert discusses Cicero, among other authors, and states that according to him there are three parts of prudence: memory, intelligence and foresight.<sup>212</sup> And prudence, it is to be noted, is primarily a human virtue. As we shall see, this Ciceronian tradition plays a major part also in Thomas Aquinas' introduction to his commentary on the *De memoria*, and it illustrates how the Latins might be tempted to regard memory as the nobler faculty.

I think, however, it is fairly clear from my analysis in the first essay that Aristotle would not say that memory is nobler than recollection. On the contrary, these two states or faculties of the soul are not really directly comparable, but if one insists on comparing them to each other, then recollection is the nobler of the two.

### Albert on Memory in His Other Works

When Albert wrote his paraphrase of the *De memoria*, he had already written about memory 10–20 years earlier in his *Summa de homine* and in *De bono*. Both works consist of questions on the respective topics.

<sup>210</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 60a–b. On Aristotle's view, see Essay 1, in the section “The Non-Existence of Memory Acts in Aristotle” above.

<sup>211</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 57b. See Averroes, *Compendium de memoria*, ed. Shields (1949), 65.

<sup>212</sup> Cf. Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 245a.

The *Summa de homine*<sup>213</sup> is the second part of the impressive *Summa de creaturis*, and perhaps the text which better than any other 13th century work illustrates the wide range of the term “memory” (*memoria*) in the middle ages. Albert begins this second part by treating the soul in general and proceeds in “Aristotelian” and “Avicennian” order to the vegetative part (qu. 7–18) and then to the sensing part (qu. 19–42). Here he treats first the external senses (qu. 19–34), and then moves on to treat the internal senses (qu. 35–42). Naturally, it is this latter part that contains a section on memory. It includes four articles:<sup>214</sup>

1. What is memory? (*Quid sit memoria?*)
2. What is the object of memory? (*Quid sit obiectum memoriae?*)
3. What is the physical organ of memory? (*Quid sit organum memoriae?*)
4. What is the activity of memory? (*Quis sit actus memoriae?*)

Of these articles, nos. 1–3 are regular Aristotelian puzzles,<sup>215</sup> while no. 4 is not strictly speaking Aristotelian, although the Latin (and the Arabic) thinkers did interpret it as such.<sup>216</sup> I will provide a sketch of no. 1, which takes up more than half of the *quaestio*, and so the following provides only the general lines of argument.

Thus, the first question: “What is memory?” is treated at length.<sup>217</sup> First, six different statements by philosophical and theological authorities are presented and briefly discussed. These authorities are: al-Gazali, Isaac ben Solomon Israeli, Gregory of Nyssa, Origenes, Plato and John of Damascus. The *a priori* surprising omission of Aristotle and Avicenna is explained by the fact that these thinkers are used in the brief discussions following the definitions rather as supreme authorities that can be brought forward to validate or discard the other authorities’ statements; and, in fact, an Avicennian theory is later provided with approving comments.<sup>218</sup> Still, it is to be noted that Albert does

<sup>213</sup> Due to considerations of accessibility, I have used P. Jammy’s edition (1651b). A critical edition by H. Anzulewicz and J. Söder is forthcoming. However, their preliminary Latin text (they themselves call it the *editio minor*) and a German translation has been published in Albertus Magnus (2004).

<sup>214</sup> Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 185a–191a.

<sup>215</sup> Arist., *Mem.* 449b4–6 (no. 1); 449b9–23 (no. 2); 449b30–450a25 (no. 3); 450a25–451a14 (no. 1).

<sup>216</sup> For the Aristotelian theory, see Essay 1 above.

<sup>217</sup> Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 185a–189a.

<sup>218</sup> Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 187b: “Magis propriam [scil. definitionem memoriae] his omnibus dat Avicenna ...” = “Avicenna provides a more proper definition of memory than all these thinkers ...”

not focus attention specifically on Aristotle's theory; the reasons may be many, but it is at least possible, and I think it is likely, that he really did not consider the theory sufficient to explain the term *memoria* in general. This might account for the somewhat ambiguous treatment of Aristotle's theory in the paraphrase.<sup>219</sup>

The most important question in the first article is whether memory by definition belongs only to the sensing part of the soul, and not to the thinking part. However, other standard definitions are discussed, for instance, memory as a preserving capability and memory as the direct apprehension of something in the soul. The entire article is also evidence that there was some terminological confusion as regards the different, relevant terms (*memoria*, *memoratio*, *rememoratio*, *conservans*, *reminiscentia*, *recordatio*). Albert, then, sets forth the most salient difficulties of the individual theories and goes on to the solution: memory is a term that can be used in many different ways (*memoria multipliciter dicitur*).<sup>220</sup> Thereupon, he proceeds to show that the six thinkers who stated different theories of memory did not really disagree with each other; they just emphasised different aspects of memory.<sup>221</sup> Finally, he presents arguments against all the difficulties that had earlier been stated.<sup>222</sup>

The result of Albert's discussion, then, is a broad conception of memory that includes many different aspects: retention (of both images and intentions), acts, direct apprehension of the object, memory as recollection etc. Therefore, it is perhaps not too surprising that Albert years later in his paraphrase of the *De memoria* found it difficult to interpret the narrow theory of Aristotle: on the one hand, it would have been relatively easy to say, as he does concerning a number of prominent thinkers in the *Summa de homine*, that Aristotle only treats part of memory; but on the other hand, that might detract from Aristotle's status as a supreme authority that can be used, among other things, to settle disputed issues. Therefore, Albert chose an approach similar to the one that many scholars of the 20th and 21st centuries have chosen: to attribute a broad theory of memory to Aristotle, even if there is no real textual support. In light of the somewhat peculiar structure of his paraphrase (that is, the distinction between a Peripatetic and an

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<sup>219</sup> See the other sections on Albert the Great above.

<sup>220</sup> Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 187a.

<sup>221</sup> Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 187a–b.

<sup>222</sup> Albertus Magnus, *Summa de homine* qu. 38, ed. Jammy (1651b), 188a–189a.

Aristotelian theory), it seems to me, however, that Albert may have been at least partly aware of some of the difficulties involved in this approach.

Albert also treats memory in his *De bono*,<sup>223</sup> a work that is generally regarded as following immediately upon the *Summa de homine*, and as the last work gathered under the main title: *Summa de creaturis*.<sup>224</sup> In the *De bono*, qu. 2, Albert discusses the parts of prudence (*de partibus prudentiae*), and, according to Cicero's *De inventione*, memory is among these. Thus, Albert must examine what memory is,<sup>225</sup> and, much more elaborately, he examines the art of memory.<sup>226</sup> The former is the interesting one, as regards the philosophical discussion of memory, but Albert is much more concerned with the latter, that is, artificial memory (*memoria artificiosa*), which he ends up defining as "memory [...] in the sense of recollection".<sup>227</sup> For details he refers the reader to the treatment of memory in the *Summa de homine*.

In *De bono* IV. qu. 2, art. 1, Albert asks, then, what memory is.<sup>228</sup> Proceeding from Cicero's definition of memory as "that by which the mind reobtains the things that were",<sup>229</sup> he states a number of difficulties in making memory part of prudence. Two are particularly important for the present purpose:<sup>230</sup>

1. It was already established in the *Summa de homine* that memory belongs to the sensing part of the soul, but prudence belongs to the rational part.
2. Reobtaining a thing that is not present anymore must either happen (a) by reason, proceeding from a determinate starting point, or (b) solely by sensible forms occurring internally. However, if (a)

<sup>223</sup> I have used Geyer's edition of *De bono*, 4th treatise (*De prudentia*) in Kühle & Feckes & Geyer & Kübel (1951), 217a–258b.

<sup>224</sup> Cf. Geyer's Prolegomena in Kühle & Feckes & Geyer & Kübel (1951) IX–XIII. Apparently, there is a reference in the *De bono* to the paraphrase of the *De memoria*, which is said not to have been written yet, cf. Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 247a with the *apparatus fontium*.

<sup>225</sup> Albertus Magnus, *De bono* IV. qu. 2, art. 1, ed. Kühle et al. (1951), 245a–246a.

<sup>226</sup> Albertus Magnus, *De bono* IV. qu. 2, art. 2, ed. Kühle et al. (1951), 246a–252a.

<sup>227</sup> Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 250a: "Hoc tamen notandum, quod in omnibus istis memoria posita sit pro reminiscencia." = "However, it must be noted that in all these examples memory is used in the sense of recollection."

<sup>228</sup> Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 245a.

<sup>229</sup> Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 245a: "memoria est, per quam animus repetit ea quae fuerunt."

<sup>230</sup> Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 245a–b.



is true, Albert says with reference to his exposition in the *Summa de homine*, then it is an act of recollection, not memory, and if (b) is true, then memory belongs only to the sensing part of the soul and cannot be part of prudence.

The objections proposed are Peripatetic, and from an Aristotelian point of view they are substantial. But Albert wants memory to be part of prudence, and he solves the difficulties by appeal to a distinction in the concept of memory: memory is part of prudence but only when its function is rather that of recollection than that of (Aristotelian) memory.<sup>231</sup> Thus, recollection is defined as a kind of memory.

This is not in accordance with Aristotle's *De memoria*, and Albert knows this. He does not admit a contradiction in this passage, but in the following section IV. qu. 2, art. 2, he states that, according to Aristotle in the *De memoria*, a type of memory which proceeds actively from determinate starting points is not really memory proper, but rather recollection.<sup>232</sup> His solution is an appeal to another authority, Cicero, from whom he here derives directly the broad concept of memory.<sup>233</sup>

So, in the *De bono* Albert recognises a broad concept of memory, which comprises both memory proper and recollection. Albert does not, however, draw any noticeable consequences from this theory. That was left to the philosophers who followed.

## Conclusion

In conclusion, it seems that, despite his basically correct interpretation of Aristotle's theory of memory, Albert was caught in the interpretations of the Arabic tradition, and Cicero also plays a major part in his conception of memory. His entire exposition of memory and recollection is very perceptive, but blurred by the fact that he wants to include both the Aristotelian theory and the Arabic theory (between which no opposition should exist). As regards recollection, he explicitly adopts an Arabic interpretation and explains Aristotle using this interpretation, but concerning memory he seems to present two theories, neither of which he explicitly rejects. In particular, it is noteworthy that he does

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<sup>231</sup> Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 245b: "Solutio: Dicimus, quod memoria est pars prudentiae, secundum quod memoria cadit in rationem reminiscen-tiae." See also Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 250a.

<sup>232</sup> Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 246b.

<sup>233</sup> Albertus Magnus, *De bono*, ed. Kühle et al. (1951), 250a.

not use the theory of internal senses when expounding Aristotle's own theory. This kind of confusion between an Arabic and a purely Aristotelian interpretation is still seen in Albert the Great's famous pupil, who did, however, attempt to resolve the difficulties, but the fact that Aristotle's theory of memory is very narrow and does not allow for an active memory continued to disturb interpretations of Aristotle.

For the reasons stated, Albert's views (whether or not they were compatible with Aristotle's) must be considered somewhat incomplete. It is not clear exactly which theory Albert preferred, the Aristotelian or the Arabic, and the *Summa de homine* and the *De bono* with their somewhat different perspectives make it even more difficult to establish a coherent and consistent theory from Albert's works.<sup>234</sup> As an interpreter of Aristotle's theory of memory in chapter one of the *De memoria* I believe that Albert did better than most of his predecessors and followers, but he does not himself seem to be completely consistent as regards the definition of memory.

*Thomas Aquinas (ca. 1225–1274)*

Thomas Aquinas is the most studied of the medieval thinkers, and the only one whose commentary on the *De memoria* has been edited in two modern editions.<sup>235</sup> The commentary is the second treatise of the *Sententia de sensu et sensato*. I refer to the text as the *Sententia de memoria*.

It is beyond dispute that Aquinas was one of the first to use William's new translation. His text is filled with quotations (or rather lemmata), and both Spiazzi and Gauthier in the Leonine edition print this translation along with the commentary.<sup>236</sup>

<sup>234</sup> However, Steneck (1980) 278 argues that Albert's views on the senses had matured and established themselves significantly when he wrote the paraphrase of the *De anima* compared to the views found in the *Summa de homine*.

<sup>235</sup> Spiazzi (1949); the editio Leonina (1985) by R.A. Gauthier. I use the Leonine edition. An Italian translation with a brief introduction is found in Caparello (1997), and an English translation with useful introduction and notes (by Macierowski) is found in White & Macierowski (2005) 169–260. There is also an English translation by J. Burchill in Carruthers & Ziolkowski (2002) 153–188.

<sup>236</sup> For a detailed account of the textual foundation of Aquinas' commentary, cf. Gauthier (1985) 75\*–80\*. For studies in Aquinas' theory of memory, cf. Yates (1966) 81–87; Coleman (1992) 422–460. See also E.M. Macierowski's notes in White & Macierowski (2005) 235–260.

### Aquinas' Sources

Thomas Aquinas' commentary on the *De memoria* is conceived as a clear-cut exposition of the text, for which he takes full responsibility. However, as was the case with Albert the Great, memory is also discussed elsewhere in Aquinas' works; in particular, in the *Summa theologiae*. As in the case of Albert, the commentary will form the basis of my investigation, and only afterwards will I investigate also his other writings on memory.

When Aquinas wrote this commentary about 1270, he had available quite a few tracts dealing, more or less explicitly, with this same Aristotelian text.<sup>237</sup> In addition to a number of those already treated (in particular Avicenna, Averroes and Albert), Aquinas also had access to Adam of Buckfield's exposition of the *De memoria* (written in the middle of the 13th century) and the earlier Latin tradition with Augustine being the most important source.

So, not only did Aquinas have access to a new, and better, translation of the *De memoria*, he also had the benefit of possessing a number of excellent treatments of memory, including some with explicit reference to Aristotle's theory. The difficulty consisted in establishing a coherent theory of memory, eliminating, or at least elucidating, the differences between the individual sources: Aristotle, Augustine, the Arabs and Albert and other early 13th century Latin thinkers and commentators.

### The Introduction to Aquinas' Commentary on the *De Memoria*

Whereas Albert the Great introduced his paraphrase of the *De memoria* by examining the Peripatetics' views on the treatise, Aquinas presents a more general introduction that rather resembles Albert's *De bono*.<sup>238</sup> The guiding theme is "prudence" (*prudentia*), and Aquinas has made use of several authorities, in particular, Aristotle, Cicero, Augustine and Albert.<sup>239</sup> As we have already seen, Cicero had stated in his *De inventione* that prudence contains memory as one of its elements; for the prudent person must not only sense and cognise the present but also let himself

<sup>237</sup> Besides my own research presented above, the following remarks are based on Gauthier (1985) 111\*–125\*.

<sup>238</sup> For the following, see also Thomas Aquinas, *Summa theologiae* II.2. qu. 49, art. 1, editio Leonina (1895, vol. VIII), 367a–b.

<sup>239</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 103a–104a.

be directed by his past experiences.<sup>240</sup> For this, memory is required. Augustine had agreed in his *De trinitate*, and Albert had followed their lead in his *De bono*.

Thus, Aquinas begins by placing memory in an ethical and epistemological tradition, and he makes further use of this discussion of "prudence" in his preliminary demarcations of memory and recollection: for, he says, just as animals have imperfect prudence, since they lack, in particular, true foresight (*providentia*) and intelligence (*intelligentia*), so they also have imperfect memory (*memoria imperfecta*), because they only "remember" (*memorantur*), while human beings both "remember" (*memorantur*) and "recollect" (*reminiscuntur*).<sup>241</sup> These preliminaries seem to indicate that Aquinas explicitly distances himself from a clear conceptual distinction between memory and recollection. It might, therefore, be said that Aquinas is off to an un-Aristotelian start (based on Cicero and Augustine). As we shall see, the strength of such an analysis of memory was to become more obvious in other philosophers (notably in Scotus) and contributed to the production of somewhat different theories of memory.

#### Aquinas on Memory in the Commentary on the *De Memoria*

In his exposition of the *De memoria*, Aquinas is not, however, completely true to his initial statement about memory and recollection. Working through Aristotle line by line, he does uphold the Aristotelian distinction between these two capacities,<sup>242</sup> but, like Albert before him, he also finds room for an active memory in the text. And he goes further than Albert in trying to reconcile the Arabic theories of internal senses and intentions with the Aristotelian views.

As regards Aristotle's primary analysis of memory and the following definition, Aquinas' exposition is on the same lines as Albert's, although it is less clearly articulated, probably because Aristotle himself is somewhat unclear on this issue. Using Aristotle's example of a painting (of an animal), Aquinas states that even though the object is fundamentally

<sup>240</sup> Aquinas adds, on the authority of Aristotle, *Metaph.* 980a27–b25, that this also applies to some animals which have a kind of prudence by natural instinct.

<sup>241</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 104a. See also Thomas Aquinas, *Summa theologiae* I. qu. 78, art. 4, editio Leonina (1889, vol. V), 257a–b.

<sup>242</sup> Although there are occasional hints that the distinction is not entirely solid, cf. e.g. Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 106a.

one (*cum idem subiecto sit*), there are two different ways of considering this object: one consideration (*consideratio*) views the object simply as an animal in a painting (*animal pictum*), while another consideration views it as an image that represents a real animal (*imago animalis veri*).<sup>243</sup> This is all directly from Aristotle, only slightly more elaborate. It seems, however, that Aquinas differs from Aristotle in seeing the second kind of consideration as a particular kind of preservation of the object. At least, that is the conclusion that one must draw from his final definition of memory, which is meant to be in accordance with Aristotle's final definition; for here Aquinas defines it as "a kind of dispositional preservation" (*habitualis quaedam conservatio*).<sup>244</sup> But, on the other hand, he also describes the two types of consideration of images as the soul turning itself towards the image in different ways, and this can hardly be a description of preservation.<sup>245</sup> The interpretive efforts of Aquinas in this passage are focused on distinguishing between *speculamen* and *fantasma* (Gr. θεώρημα and φάντασμα) in *De memoria* 45ob26, which he regards as a distinction between an intellectual object and a sense object. The intellectual object is, so to speak, extracted from the image by the intellect, while the sense object as such is apprehended by the imaginative capacity (*vis imaginativa*).

Aquinas does, however, make one major step forward compared to Albert, as regards the clarity of their theories of memory: he does not state *two* separate, equally valid (?), theories (an Aristotelian and an Arabic) but rather puts forward an Aristotelian theory, which he interprets using the thoughts of Avicenna and Averroes.

The Arabic influence is seen already in Aquinas' interpretation of *speculamen* and *fantasma* as distinct objects. Aristotle attributed the viewing of this kind of object to the imagination (φαντασία), but Aquinas uses the division of the faculties of the soul found in Avicenna to account for his own distinction.<sup>246</sup> Thus, he uses Avicenna's *vis imagi-*

<sup>243</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 115a–b.

<sup>244</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 116b. See also further below and Arist., *Mem.* 451a14–16.

<sup>245</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 115b: "Sic igitur manifestum est quod, quando anima convertit se ad fantasma prout est quaedam forma reservata in parte sensitiva ... Si autem anima convertatur ad ipsum in quantum est imago eius quod prius vidimus aut intelleximus ..." = "So, then, it is clear that when the soul turns itself to the *fantasma*, in so far as this is some form that is preserved in the sensitive part ... But if the soul turns to the *fantasma*, in so far as it is an image of what we have previously seen or understood ..."

<sup>246</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 115b–

*nativa* to account for the apprehension of a sense object *per se*. Remembering, as stated by Aristotle and others, contains a further reference to something in the past. And thus, Aquinas says, Avicenna was right to say that memory concerns the intention of an object, whereas *imaginatio* concerns the form that was apprehended through sensing.<sup>247</sup> For “to be an image (of something)” signifies an intention related to the form.<sup>248</sup> This is, I think, a clever interpretation, albeit a difficult one, since the Avicennian theory does not regard the sensible form as part of memory, which Aristotle certainly does. But Averroes seems to have used the term “intentions” somewhat more broadly,<sup>249</sup> and Aquinas may well have followed Averroes’ lead. Furthermore, in his *Summa theologiae*<sup>250</sup> he states that sensible forms are perceived in the same way by human beings and other animals, but intentions are not. For in animals these are apprehended by natural instinct, but in human beings a cogitative faculty does the apprehending. And he goes on to state another difference, *viz.* that animals have only the memorative faculty, while human beings are also capable of recollecting. This is, of course, Aristotelian doctrine, but in the same passage Aquinas describes memory as “sudden recall of things past” (*in subita recordatione praeteritorum*). This is similar to the Averroean analysis, and thus memory is simply described, both in the commentary and in the *Summa*, as considering (or containing) a particular set of features found in the image, *viz.* the features that relate the image to a past object.

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116a. See also Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 109b–110a.

<sup>247</sup> See also Thomas Aquinas, *Summa theologiae* I. qu. 78, art. 4, editio Leonina (1889, vol. V), 256a: “Ad conservandum autem eas [*scil.* intentiones], vis memorativa, quae est thesaurus quidam huiusmodi intentionum. Cuius signum est, quod principium memorandi fit in animalibus ex aliqua huiusmodi intentione, puta quod est nocivum vel conveniens. Et ipsa ratio praeteriti, quam attendit memoria, inter huiusmodi intentiones computatur.” = “And for the preservation of intentions, there is the memorative power, which is a storing place of intentions of such a kind. There is a sign of this in the fact that the principle of remembering in animals is found in an intention of such a kind, for instance, that something is harmful or agreeable. And the very formality of the past, which memory attends to, must be reckoned among such intentions.”

<sup>248</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 115b–116a: “Et quia esse imaginem significat intentionem quandam circa hanc formam, ideo convenienter (dicit) Avicenna quod memoria respicit intentionem, imaginatio vero formam per sensum apprehensam.” See also Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 110a.

<sup>249</sup> See the section on Averroes above.

<sup>250</sup> Thomas Aquinas, *Summa theologiae* I. qu. 78, art. 4, editio Leonina (1889, vol. V), 256a–b.

A surprising feature of the commentary must also be mentioned, *viz.* the fact that Aquinas says very little about intellectual memory. Aristotle did not recognise intellectual memory as a full-fledged faculty, even though scholars often claim that he did do so in at least one passage of the *De memoria*.<sup>251</sup> However, it seems to me that Aristotle is not there talking about a full-fledged faculty but rather about an accidental phenomenon found in some animals, *viz.* human beings. In the commentary Aquinas is satisfied with restating and expounding the Aristotelian theory; at least he does not explicitly contradict it. He does, however, add briefly that some thinkers believe that memory is found in the thinking part of the soul; the definition of intellectual memory provided in this case is as follows: “every dispositional preservation of objects of the kind that pertains to the thinking part.”<sup>252</sup> The thinker primarily in Aquinas’ thoughts must be Augustine, to whom Aquinas refers repeatedly in the more independent treatment of intellectual memory in the *Summa theologiae*. Thus, we have here a true conflict of authorities, but Aquinas does not settle the matter. However, the analysis of non-intellectual memory in the introduction to the commentary on *De memoria*, in which it is called “imperfect”, indicates that he does not agree with Aristotle on this issue.<sup>253</sup> In the following section, I shall return to the theory put forward in the *Summa theologiae*.

All this having been said about the theory expounded in the commentary, and despite the fact that Aquinas often makes much sharper distinctions than, for instance, Albert the Great and tries to relate the different theories of Aristotle and the Arabics, he runs into the same kind of problems as Averroes did; or perhaps one should rather say that he adopts the same general kind of solution as Averroes: an explicitly broad and comprehensive kind of memory. However, the many roles that he assigns to memory at various points of the *Sententia de memoria* are not always easily compatible.

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<sup>251</sup> See in particular Arist., *Mem.* 450a22–25. Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 201, hesitantly suggests that *Mem.* 449b20–21 also establishes an intellectual memory. See also Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 105b–106a. In general, the medievals often used Arist., *An.* III.4 to establish the existence of intellectual memory (see the following subsection).

<sup>252</sup> See Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 111b: “Memoria tamen a quibusdam ponitur in parte intellectiva secundum quod per memoriam intelligitur omnis habitualis conservatio eorum quae pertinent ad partem intellectivam.”

<sup>253</sup> See also the terminological distinctions between *speculamen* and *fantasma* in Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 115a–b.

Aquinas apparently introduces an active kind of memory without thinking it difficult to his exposition. As we have seen, all previous Latin thinkers used a concept of memory that was much broader than Aristotle's, and so does Aquinas. First, he uses the terms "state of having"/"disposition" (Lat. *habitus*; Gr. ἔξις) and "affection" (Lat. *passio*; Gr. πάθος). In commenting on *De memoria* 449b24, Aquinas says:<sup>254</sup>

Deinde cum dicit: *Est quidem igitur* etc., concludit ex praemissis quid sit memoria, quia neque est sensus, qui est solum praesentium, neque est opinio, quae potest etiam esse futurorum, sed oportet quod ad aliquid horum pertineat, vel per modum habitus (puta si sit aliqua vis permanens) vel per modum passionis (puta si sit aliqua impressio transiens).

Then, when he [*scil.* Aristotle] says: *It is, then*, etc., he concludes from the premisses what memory is, *viz.* that it is neither sensing, which is solely of present objects, nor is it conception, which can also be of future objects, but it must pertain to one of these, either by mode of a disposition (that is, if there is a more permanent capacity) or by mode of an affection (that is, if there is a transient impression).

Thus, Aquinas makes a distinction between "disposition"/"state of having" and "affection". In the previous essay I argued that there is no such great difference between the corresponding Greek terms (ἔξις and πάθος).<sup>255</sup> However, by his interpretation Aquinas has provided Aristotle with a concept of memory that comprises, at least partly, both activity and passivity: the disposition that is explicitly called a capacity (*vis*), presumably for making the retained object appear, and the purely passive affected impression, which is the result of sensing or thinking, but which will disappear if nothing is done to establish it as a more permanent capacity. This interpretation of Aristotle's foundation is, it seems to me, very close to the interpretation proposed by Richard Sorabji:<sup>256</sup> Disposition is not truly active memory, but comprises the active aspect of internally actualising the content.<sup>257</sup>

<sup>254</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 106b. See also Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 118a.

<sup>255</sup> See Essay 1, the section "The Non-Existence of Memory Acts in Aristotle" (subsections "Aristotle's Definition of Memory" and "Richard Sorabji's View") above.

<sup>256</sup> Sorabji (2004<sup>2</sup>). See my Essay 1, the section "The Non-Existence of Memory Acts in Aristotle" (subsection "Richard Sorabji's View") above.

<sup>257</sup> Cf. also Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 113b: "Memoriam autem nominat 'habitum' huius partis [*scil.* sensitivae], quia memoria est in parte sensitiva et ea quae in memoria conservamus quandoque non actu apprehendimus, sed quasi habitualiter tenemus." = "But he [*scil.* Aristotle] calls memory a 'disposition' in the sensing part, because memory is in the sensing part, and those



However, Aquinas also has a clear-cut (although not theoretically clear) distinction between active and passive memory. In chapter (or lesson) 1 he introduces the Aristotelian work with the already mentioned remarks on memory and recollection, which add up to a single, comprehensive kind of memory.<sup>258</sup> But later in chapter 1 he has the following statement:<sup>259</sup>

Et quia memorari nihil est aliud quam bene conservare semel accepta, inde est quod illi qui sunt tardi ad recipiendum, bene retinent recepta, quod est bene memorari.

And therefore those who are slow to receive are good at retaining the received objects, which constitutes to be good at remembering, because remembering is nothing but being good at preserving that which have once been apprehended.

This is a clear-cut definition of memory as a retentive capacity, and thus a very limited one indeed. And it seems to be Aquinas' basic definition, for in the conclusion to his exposition of *De memoria* 1, he paraphrases the Aristotelian definition as follows:<sup>260</sup>

Memoria est habitus (id est habitualis quaedam conservatio) fantasmatis, non quidem secundum se ipsum (hoc enim pertinet ad virtutem imaginativam), sed in quantum fantasma est imago alicuius prius apprehensi.

Memory is a disposition (that is, a kind of dispositional preservation) of an image; not, however, of the image *per se* (for this pertains to the imaginative faculty), but rather in so far as the image is a representation of something that was previously apprehended.

Thus, Aquinas explicitly interprets Aristotle as saying that memory is a disposition that preserves information, and this agrees with the former statement: that memory is nothing but preservation. It is not, in this fundamental sense of memory, a faculty that apprehends the content of what is stored.<sup>261</sup>

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objects that we preserve in memory we sometimes do not apprehend in actuality but hold them dispositionally, so to speak."

<sup>258</sup> See the subsection "The Introduction to Aquinas' Commentary on the *De Memoria*" above.

<sup>259</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 104b.

<sup>260</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 116b. See also Thomas Aquinas, *Summa theologiae* I. qu. 79, art. 6 & 7, editio Leonina (1889, vol. V), 270a, 272a.

<sup>261</sup> Cf. Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 113b: "ea quae in memoria conservamus quandoque non actu apprehendimus, sed quasi habitualiter tenemus." See also above on disposition (*habitus*).

But, similar to the case of Averroes, Aquinas feels the need to deal with an activity of memory (*actus memoriae*). Like Albert the Great before him, Aquinas was influenced here also by the earlier Latin tradition as well as his own overall views on memory. Aquinas wants an active memory to be present in Aristotle but has some difficulties establishing it on the basis of the text, as is well illustrated by his treatment of the verbal form *memorari*.

Like Albert, Aquinas interpreted *memorari* of the very first line of the *De memoria* as signifying this act, thus distinguishing between the static (passive) noun and the active verb.<sup>262</sup> But on the very same page of the Leonine edition, he says (as cited above) that *memorari* is nothing but preservation of something that has been obtained. This can hardly be the *act* of memory. And furthermore, only a little later Aquinas states that chapter 1 of the *De memoria* is devoted to *memorari*, chapter 2 to *reminisci*,<sup>263</sup> which only makes sense if both *memorari* and *reminisci* are taken in general to comprise memory and recollection respectively; for these are the general subjects that Aristotle examines in the two chapters. Therefore, *memorari* (Gr. μνημονεύειν) is not the act of memory in the Averroean sense, and Aquinas himself does not use the term consistently in this way.

However, Aquinas' views on active memory in Aristotle are not based solely on an interpretation of *memorari*. Active remembering seems to be part of the experience of all human beings, and thus it must also be found in Aristotle's treatise, or so the argument might go. The problem is that Aristotle narrowed down the conceptual territory of memory so much that this process could no longer be described as memory proper.<sup>264</sup>

We have seen above that, according to Aquinas' interpretation, remembering in the crucial passage of *De memoria* involves turning your soul towards an already established internal image, and this is not preservation. Furthermore, in his commentary on *De memoria* 451a2–12, Aquinas conceives the three Aristotelian examples of remembering and mis-remembering as different attitudes of human beings towards the

<sup>262</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 104b. See Arist., *Mem.* 449b4.

<sup>263</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 105a: "Et primo determinat de memorari, secundo de reminisci, ibi: *De reminisci autem reliquum* etc."

<sup>264</sup> It must also be noted that *memorari* renders both μνημονεύειν and μεμνήσθαι, although the latter is sometimes also rendered by *reminisci*.

“act of memory” (*actus memoriae*),<sup>265</sup> and the following exposition shows that he is talking about the actual viewing of an internal image.

It seems, then, that at least three different kinds of “memories” are found in Aquinas’ commentary: (1) preserving memory, which is the fundamental one; (2) a dispositional memory, which is in a sense identical with the first; but whereas the former is solely regarded as a storehouse, the latter is constantly poised for actualising the content; and finally, (3) an active memory, which comprises viewing the internal (memory-)image.

### Aquinas on Memory in the *Summa Theologiae*

The theory of memory found in Aquinas’ *Sententia de memoria* is naturally somewhat restricted by the fact that it is proposed in a literal commentary on a standard authority, but still it constitutes a highly technical treatment of a problem that is basically philosophical. In the *Summa theologiae* Aquinas treats memory on the terms of theology.<sup>266</sup> In this treatment he is primarily interested in the intellect among the human and animal faculties, and so memory is treated in this light, that is, as a preamble to the (more important) treatment of the human intellect.<sup>267</sup> However, since memory belongs also to an intellectual faculty, according to e.g. Augustine, it has a larger part in the discussion than the other internal senses. And furthermore, as was the case already with Gundissalinus, memory also has an important religious function.<sup>268</sup>

First, Aquinas asks, in a kind of introductory discussion to the internal senses, whether these should really be distinguished as a separate category.<sup>269</sup> The answer is affirmative, since the external senses are

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<sup>265</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 116a: “Et dicit quod, quia tunc memoramur quando attendimus ad fantasma secundum quod est imago eius quod prius sensimus et intelleximus, ideo circa actum memoriae tripliciter se habent homines.” = “And he [*scil.* Aristotle] says that human beings have three different attitudes towards the act of memory, because we remember, when we attend to the image in so far as it is an image representing something that we have previously sensed or thought.”

<sup>266</sup> The most important passages are: *Summa theologiae* I. qu. 78, art. 4; I. qu. 79, art. 6–7; II.1. qu. 32, art. 3; II.2. qu. 48; II.2. qu. 49, art. 1. References to relevant passages in other works by Aquinas can be found in the Leonine edition.

<sup>267</sup> Thomas Aquinas, *Summa theologiae* I. qu. 78, intro., editio Leonina (1889, vol. V), 250a–b.

<sup>268</sup> See the section on Dominicus Gundissalinus above. And, for Scotus’ later treatment, see the section on John Duns Scotus below.

<sup>269</sup> Thomas Aquinas, *Summa theologiae* I. qu. 78, art. 4, editio Leonina (1889, vol. V).

not sufficient to account for the capabilities of animals; in particular, Aquinas cites the Avicennian example of the sheep and the wolf in order to show that intentions are needed in the description, and these are perceived internally. The authority taken in support of this distinction is Avicenna; Aristotle is not mentioned.

As we have seen, Aquinas followed the Arabic thinkers (at least partly) in positing intentions as the objects of memory, and more particularly he seems to follow Averroes in defining memory as occurring "in a sudden recall of past objects" (*in subita recordatione praeteritorum*).<sup>270</sup> The theory in the *Summa theologiae* is then much more explicit as regards intentions than that of the *Sententia de memoria*, and more dependent on the Arabic thinkers than the commentary. Also, Aquinas here follows Averroes in positing only four internal senses instead of Avicenna's five.

In the next question (I. qu. 79), Aquinas begins to treat the intellect, and that treatment involves discussion of the Augustinian theory of an intellectual memory. Thus, Aquinas asks whether memory belongs to the intellectual part,<sup>271</sup> and his (un-Aristotelian) answer is affirmative. The basic definition of memory is that it preserves forms that are not actually apprehended as existing now, but Aquinas claims that we must then distinguish between intelligible forms and sensible forms. As the authoritative passage for the former, he cites Augustine's *De trinitate*: memory, intelligence and will are one,<sup>272</sup> and it is noteworthy that Aristotle is not used in this passage as an authority in favour of the opposite view, *viz.* that memory belongs solely to the sensing soul.<sup>273</sup> For, paradoxically, Aristotle is used instead to substantiate the argument for intellectual memory. Thus, whereas Avicenna had claimed that the intelligible species could not be preserved in the intellect, Aquinas claims Aristotle's *De anima* III.4 in support of the thesis that the intellect always has the possibility of using these species, and thus they must be preserved. Aquinas concludes that a distinction must be made:<sup>274</sup>

<sup>270</sup> Thomas Aquinas, *Summa theologiae* I. qu. 78, art. 4, editio Leonina (1889, vol. V), 256b.

<sup>271</sup> Thomas Aquinas, *Summa theologiae* I. qu. 79, art. 6, editio Leonina (1889, vol. V), 270a–272b: "Utrum memoria sit in parte intellectiva animae." = "Whether (a) memory is found in the intellectual part of the soul."

<sup>272</sup> Augustine, *De trinitate* X.11, ed. Mountain (1968, vol. XVI.1), 330–331.

<sup>273</sup> But see Thomas Aquinas, *Summa theologiae* II.2. qu. 49, art. 1, editio Leonina (1895, vol. VIII), 367a.

<sup>274</sup> Thomas Aquinas, *Summa theologiae* I. qu. 79, art. 6, editio Leonina (1889, vol. V), 270b.

Sic igitur, si memoria accipiat solum pro vi conservativa specierum, oportet dicere memoriam esse in intellectiva parte. Si vero de ratione memoriae sit quod eius obiectum sit praeteritum, ut praeteritum, memoria in parte intellectiva non erit, sed sensitiva tantum, quae est apprehensiva particularium.

Therefore, the situation is as follows: If memory is taken solely in the sense of a power that preserves species, it must be claimed that memory is in the intellective part. But if it is also included in the notion of memory that its object is of the past as past, then memory will not be in the intellective part, but solely in the sensing part, which is the one that apprehends particulars.

This fits uncomfortably with Aristotle's *De memoria*. For, in that text Aristotle does not accept memory of intellectual objects, except accidentally,<sup>275</sup> and, as we have already seen, Aquinas is aware of this. True, in the *De anima* Aristotle famously calls the rational part of the soul the "place of forms", but he does not define this kind of retention as memory, and he never relates the *De anima* passage to the *De memoria*.<sup>276</sup> Therefore, even though Aristotle's general point in this part of the *De anima* is very obscure, Aquinas' interpretation is based on his own thoughts as regards memory, not Aristotle's explicit statements, and from Aristotle's point of view it is simply not correct, I believe, to define the intellectual retention of forms as memory.

Thus, it appears from the *Summa theologiae* that (1) Aquinas does not doubt that a separate kind of intellectual memory is needed in order that human beings can apprehend intelligible forms, and (2) he follows the authority of Augustine, even though he also feels that he can use Aristotle in support; but not the *De memoria*.

Finally, in *Summa theologiae* II.2. qu. 49, art. 1, "On the individual, integral parts as it were of prudence" (*De singulis prudentiae partibus quasi integralibus*), Aquinas treats the role of memory in prudence, the topic that Albert the Great treated in his *De bono* and which Aquinas himself touched upon in the introduction to his *Sententia de memoria*: memory as part of prudence. In this analysis he follows Albert's arguments and states that memory really is part of prudence. As regards Aristotle's

<sup>275</sup> See *Mem.* 450a12–14; 450a22–25.

<sup>276</sup> Arist., *An.* 429a27–29: καὶ εὖ δὴ οἱ λέγοντες τὴν ψυχὴν εἶναι τόπον εἰδῶν, πλὴν ὅτι οὐτε ὅλη ἄλλ' ἢ νοητικὴ, οὐτε ἐντελεχεῖα ἀλλὰ δυνάμει τὰ εἶδη. = "So, those who call the soul 'the place of forms' are right in doing so, except that it does not apply to the entire soul but only to the intellective, and here it applies to the forms only potentially, not actually."

theory, he refers, both in the section of arguments and in his resolution of the problem, to the *De memoria*, not to the *De anima*.

### Conclusion

Aquinas' theory of memory, then, is difficult to categorise properly. In general he regards retention as the basic feature of memory. This may be inspired both by the Arabic and the Latin tradition, but in fact Aquinas believes that this was also Aristotle's theory. Under the influence of a number of other sources (Avicenna, Averroes, Cicero, Augustine and the earlier Latin tradition), Aquinas does, however, encounter the same difficulties of heterogeneity as did Albert the Great, and even though he, contrary to Albert, attempts to solve at least some of them (notably, in attempting to fit the Arabic theories with the Aristotelian view), he still ends up with a heterogenous theory of memory. It is, however, obvious, at least in the *Summa theologiae*, that he is not generally bothered by this. He is able to cite authorities for all the different kinds of memory, and, as we have seen, he even finds intellectual memory in Aristotle's *De anima*. Albert was, at least in the paraphrase, uncertain how to deal with (some of) the apparent difficulties, but Aquinas has accepted the heterogeneity, and even though he regards retention as the basic kind of memory, he does not attempt to fit it together with the other kinds of memory that he recognises. In particular, the relationship between memory and recollection is left somewhat unclear: on the one hand, Aquinas agrees with Aristotle and all Peripatetics that they are very different, since several animals remember, whereas only human beings recollect, but on the other hand memory is incomplete without the recollective faculty. This relationship and the peculiar recollective memory were also to interest some of the following thinkers.

#### *Peter of Auvergne (ca. 1240–1304)*

Peter of Auvergne is still a lesser-known figure in the history of philosophy. He has, however, received some attention, at least partly because of the fact that he completed a few of Aquinas' commentaries, *viz.* the commentaries on the *De caelo* and the *Politics*. It has been suggested that the *Parva naturalia* is also a case in point, since he, apparently, did not write literal commentaries on the *De sensu* and the *De memoria*, that is, the only two texts of the *Parva naturalia* on which Aquinas wrote commentaries. In this respect, it is perhaps interesting that the literal com-

mentaries on the *Parva naturalia* seem to have been among Peter's most widely read works.<sup>277</sup> Furthermore a number of pertinent studies have been conducted in the last few decades, and thus it is certain that our knowledge about many aspects of Peter's works will grow over the next few years.<sup>278</sup>

But it has always been known that Peter did not just spend his working life completing the commentaries of St. Thomas. In fact, he himself wrote (in large parts, still unedited) commentaries on most of Aristotle's works, and he was much read in the following decades. The present investigation is limited to the questions on the *De memoria*, and attention is focused not only on the particular treatment of the Aristotelian treatise (a treatment which draws heavily on Aquinas' literal commentary) but also on the specific problems that Peter identified as resulting from Aristotle's discussions.

#### List of Quaestiones on the De Memoria

Peter wrote 16 relatively brief questions on the *De memoria*. The titles are as follows (in all cases "It is asked" (*quaeritur*) is presupposed):

1. Whether there is a science of memory separate from the science of the soul, presupposing that there is a science of memory (*Utrum sit scientia de memoria separata a scientia de anima, supposito quod de illa sit scientia*).
2. Whether people who are slow at discovering or learning things are good at remembering (*Utrum tardi ad inveniendum vel discendum sint bene memorativi*).
3. Whether there can be a science of expectation or about future objects (*Utrum scientia possit esse sperativa vel de futuris*).
4. Whether memory is only of past objects (*Utrum memoria sit praeteritorum solum*).
5. Whether the intellect thinks without an image (*Utrum intellectus intelligat sine fantasmate*).
6. Whether the intellect can think about a quantitative substance without quantity (*Utrum intellectus substantiam quantam possit intelligere absque quantitate*).

<sup>277</sup> Cf. Hocedez (1933) 26; de Leemans (2004) 130.

<sup>278</sup> Cf. in particular Celano (1986); White (1986); Ebbesen (1993); Dunne (2002); Ebbesen (2003); Galle (2003); de Leemans (2004); Rosier-Catach & Ebbesen (2004). For general bibliographies, see Galle (2000) and Lohr (2005) 397–399.

7. Whether forms stay in and are preserved in the intellect (*Utrum species remaneant et conserventur in intellectu*).
8. Whether there is a memorative faculty in the intellect (*Utrum in intellectu sit virtus memorativa*).
9. Whether the memorative faculty, the estimative and the imaginative differ from the common sense (*Utrum virtus memorativa, aestimativa et fantastica differant a sensu communi*).
10. Whether memory is found in all animals (*Utrum memoria insit omnibus animalibus*).<sup>279</sup>
11. Whether forgetting the thing about which the memory is concerned is required for the act of remembering (*Utrum ad actum memorandi requiratur oblivio rei de qua est memoria*).
12. Whether children or newborns are bad or good at remembering (*Utrum pueri sive noviter geniti sint immemores aut bene memorabiles*).
13. Whether slow-witted people have good memory (*Utrum tardi sint bonae memoriae*).
14. Whether recollection is to relearn or to rediscover (*Utrum reminiscencia sit iterum addiscere vel iterum invenire*).
15. Whether recollection differs from memory (*Utrum reminiscencia differat a memoria*).
16. Whether recollection is an affection in the thinking or the sensing part (*Utrum reminiscencia sit passio partis intellectivae vel sensitivae*).

These 16 questions nicely cover the subjects that one might reasonably discuss when reading Aristotle's *De memoria*, although it is, perhaps, surprising that there is no separate question to discuss whether or not there is a science of memory at all. On the other hand, the solution to this problem is provided in the first *quaestio*.

#### Authorship and Text of the Quaestiones

The authorship of the questions on the *De memoria* is not disputed. Even though they are anonymous in the transmitted texts, no doctrinal reasons have so far been advanced against this attribution, and in the manuscripts the questions are located between questions on *De sensu* and *De somno* which are explicitly attributed to Peter.<sup>280</sup>

<sup>279</sup> A similar question is found in Peter's *Quaestiones super De sensu et sensato* qu. 3 ("Utrum memoria insit omnibus viventibus." = "Whether memory is found in all living beings.").

<sup>280</sup> White (1986, vol. 2) xiv–xvii; de Leemans (2004) 135n26. Peter's questions on the



However, it must be noted that there exist two versions of these *quaestiones*:<sup>281</sup> one rather unpolished version (in O) and one that has been more thoroughly revised (in R). The precise nature of these two texts and their mutual relationship are subjects that are difficult to ascertain, but, as stated by White, it seems certain that they are neither author's autographs nor direct *reportationes* of oral performances. White therefore suggests that they are copies of written material, which go back to two separate lecture-courses, and he further states that R is probably the later version of the course. I agree that the text in O must be older than the one in R. However, it may be that R is rather a revised version of O (or, perhaps more likely, some lost manuscript that contained a similar text), and thus the former would be directly dependent on the latter. It seems to me that the texts of the two manuscripts differ not only in the fullness of the arguments but also more generally in style. If the differences were to be accounted for primarily by the fact that they go back to two different lecture-courses, albeit treating the same questions, then the change in Peter's stylistic preferences is perhaps somewhat greater than one would expect. Both texts contain traces that indicate that they were at some point used in teaching with the further aid of a literal commentary, which would almost certainly be Aquinas' exposition.<sup>282</sup> Since O seems to be the older version, and since there is at least the possibility that R is a revision by another teacher, not by Peter himself, I prefer to quote Peter from the text in O. Certainly, it should be noted that the two versions seem to presuppose different numbers of lessons, which would be strange, if they were not both used in teaching situations.

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*De memoria* are nowadays found in three manuscripts: Oxford, Merton College 275 (siglum: O); Rome, Bibl. Angelica 549 & 560 (siglum: R). The latter two manuscripts together comprise the whole text of the questions on the *De memoria*. I have used White (1986) as well as the manuscripts in my work with the *quaestiones*. Furthermore, I am currently preparing a new edition of the texts.

<sup>281</sup> White (1986, vol. 2) v–xiv. I have drawn substantially on White's analysis in my description.

<sup>282</sup> Regarding O, cf. the following subsection below. As regards R, cf. qu. 4 which is introduced by a lemma followed by the text (= Petrus de Alvernia, *Quaestiones super De memoria*, ed. White 1986, 130): "De lectione praecedenti unum remansit dubium, scilicet utrum memoria sit solum praeteritorum." = "Concerning the preceding lesson, there remains one problem, *viz.* whether memory is only of past objects." See also the similar beginnings of qu. 5 & 7 (= White 1986: 135, 148) in R. Whatever the exact content of "lesson" (*lectio*) is, it does appear that there was once some sort of division of the text in the material available to the scribe.

As regards the Latin translations, White has expressed the possibility that different translations of the *De memoria* were used in O and R respectively.<sup>283</sup> It seems to me, however, that both versions probably use the *vetus*. Even though the lemmata are relatively few and not always sufficient to make one able to state a definitive conclusion, the first lemma in R, reading “Reliquorum autem etc.”, must be the text of the *vetus*, and even though the case is less conclusive regarding O, a few passages do present the text of the *vetus* instead of the *nova*.<sup>284</sup> However, as regards the care, or perhaps the lack of care, taken in writing the lemmata, it must be noted that there is also a case where the “lemma” (or whatever it is) is simply not found in the Aristotelian text.<sup>285</sup>

### The Introduction to the Quaestiones

The introduction can be dealt with briefly, since it is an almost exact copy of the introduction to Aquinas' commentary on the *De memoria*. In fact, it is possible, as White suggests, that it was added to the question commentary by a (later?) scribe.<sup>286</sup> For it is found only in one of the two manuscripts, albeit the older one, and it ends by making a very general division of the Aristotelian text (*divisio textus*),<sup>287</sup> which is not really used elsewhere in these commentaries and is not relevant to the following questions. Therefore, it is possible that some scribe copied the introduction from Aquinas into Peter's commentary but accidentally included the division of the text, but it is also possible that Peter simply used the literal commentary in conjunction with his teaching. At least it is most likely that the teaching of Aristotle's *De memoria* was conducted with the use of both a literal commentary (by Aquinas) and a question-commentary (by Peter). It may be noted that the prologue

<sup>283</sup> White (1986, vol. 2) xxi n. 15.

<sup>284</sup> For O, cf. Petrus de Alvernia, *Quaestiones super De memoria*, ed. White (1986), 167, 186; for R, cf. Petrus de Alvernia, *Quaestiones super De memoria*, ed. White (1986), 117, 176.

<sup>285</sup> Cf. Petrus de Alvernia, *Quaestiones super De memoria*, ed. White (1986), 186 (only in R): “In quo autem dubitabit”. Ana Palanciuc informs me that none of the manuscripts containing the *vetus translatio* which she has examined to date (August 2005) has this reading. I have yet to identify the phrase. It does not seem to stem from Aquinas' commentary either.

<sup>286</sup> White (1986, vol. 2) xiii–xiv.

<sup>287</sup> Petrus de Alvernia, *Quaestiones super De memoria*, ed. White (1986), 116: “Dividitur autem iste liber in partes duas, etc.” = “Now, this book divides into two parts, etc.”

to the *quaestiones* on the *Nicomachean Ethics* attributed to Peter also relies much on Aquinas' thought.<sup>288</sup>

### The Quaestiones on the De Memoria

The 16 *quaestiones* nicely cover the most important and difficult questions posed by Aristotle's *De memoria*, but it is probably fair to say that the role of the intellect (*intellectus*) is what really interests Peter.<sup>289</sup> Thus, qu. 5–8 are primarily focused on the intellect, and in a number of the remaining questions (in particular, qu. 14–16) it also plays a major part in the argument.

This is interesting, because it indicates that the problems raised when dealing with the Aristotelian texts were particularly related to the status of intellect or mind, as regards memory. And this further proves that the Latin schoolmen were at least partly aware that their theories of memory did not, perhaps, fit comfortably with Aristotle's. Or rather: it might be taken to indicate that they thought a particular interpretative effort was needed in this area. On the other hand, the "interpretation" found in Averroes' epitome seems to have helped the schoolmen in coming to terms with Aristotle, and their confidence in the existence of intellectual memory was further strengthened by Augustine's authority. The difficulties are brought out in particular by qu. 8, 11 and 15–16.

In the brief qu. 15 it is asked whether recollection differs from memory. The process leading to the answer is revealing:<sup>290</sup>

Utrum reminiscencia differat a memoria.

1. Quod non videtur: Quia reminiscencia est prius obliti. Item, memoria est prius obliti. Et cum idem sit obiectum utriusque, quare sunt idem.
2. (a) Oppositum dicit littera: Unde non sunt idem memorativi et reminiscitivi, immo veloces ingenio bene inquirunt et sunt bene reminiscitivi, tardi autem e contrario. (b) Item, hoc apparet ex tempore, quia reminiscencia antecedit memoriam. (c) Item, reminiscencia inest solum hominibus, memoria autem inest aliis {animalibus} {animalibus *addidi*}.

It is asked whether recollection differs from memory.

<sup>288</sup> Celano (1986) 6–7, 32–34.

<sup>289</sup> Similarly, one of the best passages in Aquinas' *De memoria* exposition is concerned with the intellect, cf. Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 107a–111b.

<sup>290</sup> Petrus de Alvernia, *Quaestiones super De memoria* qu. 15, ed. White (1986), 191–192.

1. On the one hand, it seems that it does not: For recollection is of what has previously been forgotten. Further, memory is of what has previously been forgotten. And since both have the same object, they are the same.
2. (a) On the other hand, the opposite view is found in the Aristotelian text: For, people capable of remembering and people capable of recollecting are not the same, but the quick-witted are good at searching and at recollecting, while the situation is the opposite with the slow-witted. (b) Further, this appears clearly from a consideration of time, since recollection precedes memory. (c) Further, recollection is found only in human beings, while memory is found also in other animals.

No. (1) presents an argument for holding that memory and recollection do not differ from each other, while no. (2) presents three reasons, all based on the Aristotelian text (although the reference to Aristotle's authority is probably only to 2a), why memory and recollection are not identical. This is a standard beginning of a *quaestio*, although it may be noted that no. (2) is not usually in Peter's *quaestiones* elaborated with more than one argument or authoritative reference, whereas there are no less than three in this passage.

Peter then determines the question in accordance with the latter (that is, the Aristotelian) view. Still, there are at least two noticeable features in his description.

First, the argument in no. 1 says that memory and recollection are both concerned with something that has been *forgotten*, but this definition of the object of memory is not found in Aristotle; it is rather Averroes' theory of non-continuous retention of the object. And in his refutation of this argument, Peter does not resist the identification of the objects of memory and recollection respectively, but says instead that these two capacities are two different ways of reaching the same object.<sup>291</sup> Thus, he seems simply to reject the Aristotelian theory of memory found in *De memoria* 1, but in qu. 11 it becomes apparent that the term "forgetting" (*oblivio*) must be carefully examined before stating rash conclusions.<sup>292</sup>

<sup>291</sup> Petrus de Alvernia, *Quaestiones super De memoria* qu. 15, ed. White (1986), 194: "Ad rationem dicendum quod quamquam sit idem obiectum utriusque, quia tamen ad illud obiectum aliter pervenit memoria et alio modo pervenitur ad ipsum in reminiscencia, ideo differt operatio unius ab operatione alterius." = "To the argument it must be said that even though both memory and recollection have the same object, the exercise of one still differs from the exercise of the other, because memory arrives at its object in one way, recollection at its object in another."

<sup>292</sup> Petrus de Alvernia, *Quaestiones super De memoria* qu. 11, ed. White (1986), 171–175.

In qu. 11 it is asked whether the act of memory (*actus memorandi*) demands that one has previously forgotten the object that one now remembers. In favour of this suggestion he cites first and primarily Averroes (although he mistakenly names Avicenna instead) and second the Aristotelian view that there must be an interval of time between the original sensing or thinking about an object and the memory of this object. However, in the opposing argument Peter rightly identifies Aristotle's view as being that memory does not require previous forgetting. In solving the problem, Peter makes a distinction between "no longer actually considering an internal object" and "forgetting an internal object". The former is still found potentially (*in habitu*) in the soul and can be recalled whenever the person wishes, but the latter is gone and must be sensed or thought again or relearned. Memory, Peter says, does not, then, require that one first actually forgets the object, only that it is not actually present to one's attention the entire time. This is also in accordance with Aquinas' views on memory as a *habitus*.<sup>293</sup>

In qu. 15 Peter says that "memory is of what has previously been forgotten" meaning that the object is potentially present in the soul, even if not actually. This is in accordance with Averroes, but contrary to Aristotle's theory attention is focused on the process, not the state; in fact, the state seems to be absent from the account.

The second noticeable feature of qu. 15 is found at the beginning of Peter's determination of the question. Talking about memory and recollection, Peter writes:

Intelligendum quod non sunt penitus idem ...

It must be understood that they are not completely identical ...

Peter feels that memory and recollection are very close to being identical (thus the word *penitus*), even though the conclusion of the *quaestio* is that they are not. The feeling that they are nearly identical seems to be based on two supposed facts about memory and recollection: (1) that they have the same objects, which is explicitly stated, and (2) that they are both active processes towards obtaining awareness of this object. This is seen in the determination,<sup>294</sup> where it is stated that memory differs from recollection, as the simple apprehension of something differs from the apprehension of something that occurs by going through different stages. The result is the same, and the major difference is that the

<sup>293</sup> See the section on Aquinas above.

<sup>294</sup> Petrus de Alvernia, *Quaestiones super De memoria* qu. 15, ed. White (1986), 192–193.

two processes are not equally easy to perform. Like the first noticeable feature, this is in accordance with Averroes' theory rather than with Aristotle's. It must, however, be noticed that the similarities between *memoria* and *reminiscentia* had also been felt by earlier Latin authors.<sup>295</sup>

The same tendency towards an Averroean theory is seen in the treatment of the problem: to which part(s) of the soul do memory and recollection belong? Aristotle, as I have argued in the previous essay, believed that they are very different capacities and belong to the sensing and thinking part respectively.

In qu. 8 Peter asks whether a memorative faculty (*virtus memorativa*) is found in the intellect, a question to which Aquinas apparently provides different, if not conflicting, answers in the *Sententia de memoria* and the *Summa theologiae*.<sup>296</sup> Peter rightly sees that, according to Aristotle, memory belongs to the sensing part of the soul and only accidentally to the intellect.<sup>297</sup> But arguments to the contrary can be advanced. For Peter has already argued in qu. 7, on the authority of Aristotle's *De anima* III.4 and in accordance with Aquinas, that intelligible forms are preserved in the intellect, and, he now suggests, if preservation of sensible forms pertains to the memorative faculty of sense, then preservation of intelligible forms should pertain to a memorative faculty of the intellect. Furthermore, intelligible objects that are remembered are reobtained in accordance with how they were previously thought, and this kind of comprehension must pertain to the thinking part.

Peter solves the problem by using Aquinas' distinction. It is certain, he says, that forms are preserved both in the sensing and in the thinking soul. Thus, if by "memorative faculty" we mean "a faculty that preserves forms", then there must also be a memorative faculty in the intellect. If, on the other hand, "memorative faculty" is taken to mean "a faculty that preserves forms under a specific measure of time and using a particular image", then it pertains only to the sensing part of the soul. That is, Peter solves the problem by dividing memory into two different kinds: sensitive and intellectual. In this context he apparently sees memory solely as preserving, but, as we have seen, memory is rather a kind of apprehending in qu. 15. Thus, *memoria*, according to Peter, is

<sup>295</sup> Cf. e.g. the section on Albert the Great above.

<sup>296</sup> See the sections on Aquinas above.

<sup>297</sup> Petrus de Alvernia, *Quaestiones super De memoria* qu. 8, ed. White (1986), 156: "Oppositum dicit Aristoteles in littera quod memorativa non pertinet ad intellectum nisi per accidens." See Arist., *Mem.* 450a22–25.

an ambiguous term, and one needs to distinguish the different senses of the word properly. It seems that the term basically signifies either preservation (retention) or apprehension (in the sense of a process).

Finally, in qu. 16<sup>298</sup> Peter asks the similar question for recollection, *viz.* whether or not it is an affection in the thinking part of the soul or in the sensing part. The problem here is the opposite of the preceding one; for Aristotle says that recollection is like a kind of deduction (Gr. συλλογισμός; Lat. *sylogismus*),<sup>299</sup> and a deduction is certainly an act of the thinking part of the soul; and furthermore he says that only human beings recollect, but if recollection belonged to the sensing part of the soul, then other animals should also be able to recollect. The counter-argument (*ad oppositum*) interestingly is also an Aristotelian passage in which the Latins thought that they found evidence that recollection is an affection in a corporeal organ, and thus cannot belong to the thinking soul.<sup>300</sup>

Peter, along with other Latin authors, argues that recollection does *not* take place in the thinking part of the soul but in the sensing part of the soul. He does, however, make an important qualification: recollection is not just found in a sensing part but rather in a sensing part that is somehow connected with the intellect. He writes:<sup>301</sup>

Unum tamen considerandum est quod reminiscencia non est passio cuiuscumque virtutis sensitivae, sed sensitivae coniunctae virtuti intellectivae. Cuius ratio est: illud quod est in ordine inferiori, cum attingit illud quod est in ordine superiori, perfectius est. Unde virtus sensitiva, cum coniuncta est virtuti intellectivae, potentior est quam ipsa absolute considerata. Unde aliquid aliud convenit virtuti sensitivae hominis quam alterius animalis. Sicut enim intellectus qui est in homine potest conferre universalia ad invicem et discurrere ab uno ad aliud, sic virtus sensitiva cogitativa quae est in homine potest conferre ad invicem intentiones individuales et discurrere ab uno particulari in aliud. Et ideo dico quod reminiscencia est passio virtutis sensitivae secundum quod coniungitur intellectivae.

<sup>298</sup> Petrus de Alvernia, *Quaestiones super De memoria* qu. 16, ed. White (1986), 195–202.

<sup>299</sup> *Mem.* 453a9–12.

<sup>300</sup> Arist., *Mem.* 453a14–19. The Latin interpretation may have gained support from the *translatio vetus* of the *De memoria* which apparently does not contain a translation of the Greek ζήτησις in 453a15. Ana Palanciuc informs me that a translation of ζήτησις is found in none of the manuscripts that she has collated so far (August 2005). However, even writers who used Williams' translation (e.g. Aquinas) had the same interpretation, most likely as the result of tradition. For another Latin argument in favour of making recollection a feature of the sensitive faculty, cf. the section on Albert the Great above.

<sup>301</sup> Petrus de Alvernia, *Quaestiones super De memoria* qu. 16, ed. White (1986), 198–200.

One thing must, however, be considered, *viz.* that recollection is not just an affection of any sensing faculty, but of the sensing faculty that is connected with the thinking faculty. The reason is this: that which is of lower order becomes more complete when it has contact with that which is of higher order. Therefore, the faculty of sense has more potential when it is connected with the faculty of thinking than when considered separately and by itself. Therefore, the faculty of sense in a human being has something different from the one found in another animal. For just as the intellect in a human being can bring together universals and run through them from one to the other, so the sensing faculty in a human being can bring together individual intentions and run through them from one particular to the other. And therefore I say that recollection is an affection of the sensing faculty in so far as it is connected with the thinking faculty.

Here Peter goes well beyond the Aristotelian text. When he locates recollection in the sensing faculty, he runs the risk of making memory and recollection identical, and that would be against Aristotelian authority. Peter is well aware of this risk, as shown by one of the arguments against thus locating recollection,<sup>302</sup> but Averroes' theory (or interpretation of Aristotle) and a brief passage at the end of Aquinas' commentary<sup>303</sup> provide the solution, and it is further supported by the theory, held also by Aquinas, according to which the soul is constituted by a single form, not multiple forms (nutritive, sensitive, intelligent). Notably, since the soul is a single form in every living being, the sensitive capacity may reasonably be described as different in e.g. human beings and animals; for the "rest" of the form is, according to every Aristotelian and Christian interpreter, very different in humans and non-humans respectively.

Thus, the theory of the soul as one form may well be the foundation of the theory of memory, but the Arabic analyses constitute the direct inspiration. For as we have seen, memory and recollection start

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<sup>302</sup> Petrus de Alvernia, *Quaestiones super De memoria* qu. 16, ed. White (1986), 196: "Item, si reminiscencia esset partis sensitivae solum et non intellectivae, tunc reminiscencia inesset aliis (animalibus) {animalibus *addidi*} ab homine, sicut et memoria, quia alia animalia ab homine habent virtutem sensitivam. Sicut ergo habent memoriam, ita habebunt reminiscenciam." = "Further, if recollection belonged solely to the faculty of sense and not to the thinking faculty, then recollection would be found also in animals other than human beings, like memory is, because there are animals other than human beings that have the faculty of sense. Therefore, just as they have memory, so they will have recollection."

<sup>303</sup> Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985, vol. XLV.2), 132b–133a.



out as the same process and end with the same result, according to Averroes, but if the object does not present itself without too much difficulty, human beings have the possibility of using a cogitative power in order to track down this object.<sup>304</sup> Peter describes this as connecting the sensing faculty to an intelligent faculty. The use of a cogitative kind of sensing faculty (*virtus sensitiva cogitativa*)<sup>305</sup> in philosophical discussions of the memory and the soul is almost certainly originally derived from the Latin Arabics. Already Albert the Great rightly attributes the theory of a cogitative sense to Averroes, but he further claims that it is synonymous with Avicenna's *aestimatio*, and that is simply contrary to the explicit statements of Averroes; for whereas Avicennian *aestimatio*, according to Averroes, is found in all animals, his *cogitative* power is located in the intellect.<sup>306</sup> Albert may instead be thinking of a few passages in Averroes' large commentary on the *De anima* in which Averroes seems to use *cogitativa* in the required sense of *aestimativa*, but the evidence for this usage is very slight.<sup>307</sup> Peter, therefore, seems here to be close to the general thrust of Averroes' thoughts.

## Conclusion

More could be said about the remaining *quaestiones*, but this suffices, I believe, to show the concerns of a 13th century arts master when dealing with Aristotle's *De memoria*. Some questions were introductory (qu. 1), some traditionally spurred by a remark that Aristotle makes (qu. 2–3, 10, 12–13), and some were simply basic to any discussion of memory (qu. 4). Discussions about the intellect were, however, felt to be more important than discussions about the sensing faculties of human beings, and thus the occasion provided by one passage of the *De memoria*<sup>308</sup> in particular made Peter write a number of questions specifically and primarily concerned with the intellect (in particular,

<sup>304</sup> Cf. the subsection "The Epitome of the *De Memoria*" in the section on Averroes above.

<sup>305</sup> In Oxford, Merton College 275, the word *cogitativa* is found in the margin, and perhaps it should not be included in the text.

<sup>306</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 52b; Averroes, *Compendium de memoria*, ed. Shields (1949), 52–53. See also Averroes, *Compendium de somno*, ed. Shields (1949), 79–80.

<sup>307</sup> Averroes, *In de anima*, ed. Crawford (1953), 415–416, 476. However, not even in the *De anima* commentary is this the normal meaning of *virtus cogitativa*. For a list of the relevant passages, see the index in Crawford (1953) 591.

<sup>308</sup> *Mem.* 449b30–450a9.

qu. 5–7). However, the philosophical problems surrounding intellect on the one hand and memory and recollection on the other hand could be combined in discussions about which part of the soul they each belong to: the sensing or the thinking (qu. 8, 16). And once he has established that they both belong to the sensing part it becomes a problem (qu. 15–16) how one separates memory from recollection; for Aristotle thinks that they are very different. In this particular respect, there is also the problem of memory as a state and memory as an act; for whereas Aristotle defined memory only as a state, most philosophers after him, and certainly the Latin thinkers, thought that more kinds of memory could be established, and one of these was an active memory, which proceeds from not-remembering to remembering (qu. 11).

Peter's *Quaestiones super De memoria* are not, I think, in any sense doctrinally original, but they form a clear and simple introduction to the questions as regards memory that were considered important in the late 13th century.

### *Towards a Modern Theory of Memory*

One of the most important elements in later theories of memory was found more or less clearly in theories already in the 13th century; Albert the Great's *De bono*, Thomas Aquinas' introduction to his commentary and his *Summa theologiae*, and Peter of Auvergne's *quaestiones* all partly exhibited this feature: *viz.* the attribution of the status of memory proper to recollection. But apparently none of them formulated an explicit theory on this topic; they all adhered to the Aristotelian doctrine, modified by Averroes' interpretation, which brought the two concepts closer to each other, albeit still preserving the vital difference that only human beings are able to recollect, while many animals are capable of remembering. An explicit transition to a broad concept of memory on a philosophical foundation is, however, found in the years around 1300. A brief discussion by John Duns Scotus well exemplifies this transition. A more comprehensive treatment of Scotus, not to mention treatments of other early 14th century philosophers such as William Ockham and John Buridan, falls outside the scope of the present investigation.

*John Duns Scotus (ca. 1265–1308)*

In *Ordinatio* IV.45.3, John Duns Scotus formulated a theory of memory, which, in crucial respects, goes beyond earlier theories.<sup>309</sup> Scotus discusses the question: “Whether the soul, when it is separated, can recall objects of the past which it knew when it was connected [*scil.* to the body]” (*Utrum anima separata possit recordari praeteritorum quae ipsa novit coniuncta*). This is not simply a philosophical question, but also a religious problem to be dealt with, and solving the old problem about which part of the soul memory belongs to becomes of primary importance in this discussion. For it seems obvious that it is the intelligent soul that survives separation from the body, not the sensing; otherwise the souls of other animals would also survive bodily death. (In this part of the theory Scotus can also base his arguments on the fact that he adheres to the theory of multiple forms in the soul, contrary to e.g. Aquinas who claims that the soul is constituted by a single form.) But if it is the rational soul that survives, then either it does not possess memory of its past experiences or memory belongs to the rational soul. As we saw, Gundissalinus also discussed this problem but came up with no satisfactory solution.<sup>310</sup> Scotus, who does not operate with an Avicennian theory of memory, has little difficulty in solving the problem by placing a particular kind of remembering in the thinking soul. I shall not, however, discuss this solution, but instead I will focus attention on his theory of memory in general.

Even though Scotus’ *quaestio* contains many interesting observations and theories as regards a concept of memory, three points are of particular interest for my purpose:

1. Memory words and the generic concept of memory.
2. Two objects of memory: Past object and past experience.
3. Two kinds of memory: Memory in the sensing part and memory in the thinking part of the soul.

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<sup>309</sup> On Scotus’ theory of memory in general, cf. Coleman (1992) 465–499; Wolter (1990) 98–122; Wolter & Adams (1993). The *Ordinatio* IV.45.3 is edited in Wolter & Adams (1993).

<sup>310</sup> See the section on Gundissalinus above.

### Memory Words and the Generic Concept of Memory

As regards no. 1, it is to be noticed that Scotus generally writes *recordari*, not *memorari*, and he often refers to the *actus* involved in the phenomenon of *recordatio*. However, it is not simply Aristotelian recollection to which he refers, even though this is what one would expect from the term *recordatio*. Thus, he regularly cites Aristotle's views on *memoria* (μνήμη) in support of his own theory of *recordatio*,<sup>311</sup> which I translate "recall". However, contrary to most of the previous thinkers Scotus is very explicit as regards his understanding of the generic concept of memory. He writes:<sup>312</sup>

Et tunc potentia recordationis erit conservativa speciei, et hoc loquendo de totali potentia requisita ad recordationem (sive enim sint duae, quarum una conservet speciem et alia recordetur, sive una habens utrumque actum,<sup>313</sup> non curo). Saltem ad recordationem requiritur conservatio speciei obiecti recordabilis.

And then the capacity of recall will be preserving the species, and here I am speaking about the whole capacity that is required for recalling (for I am not concerned whether there are two capacities, of which one preserves the species and the other recalls it, or there is only one that has both acts). At least preservation of the species of the object of recall is required for recalling.

Apparently, retention of the *species* or form and recalling it are both basic capacities of memory in general, and Scotus is explicit that his use of "memory" or "recall" comprises all features involved in the concept. That is, memory is not *either* retention *or* recall. In his preliminary remarks he talks about "memory properly speaking" (*memoria proprie dicta*) and defines it as "recalling something from the past" (*cuius scilicet est recordari praeteriti*).<sup>314</sup> Thus, the act of recalling has been defined as "memory properly speaking", but considering the passage cited above it seems that preservation is also included; for recall does presuppose preservation. The problems that this raises as regards Aristotle and earlier Latin thinkers are not examined by Scotus. True, he does not use "recollection" (*reminiscentia*) as synonymous with "recall" (*recordatio*),

<sup>311</sup> E.g. Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 193, 196, 201.

<sup>312</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 196.

<sup>313</sup> I note that *actus* in this passage signifies "function", not "act" in the more limited sense that I have analysed throughout this essay.

<sup>314</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 194.

and thus he upholds the Aristotelian distinction, but earlier thinkers had generally regarded *reminiscentia* and *recordatio* as signifying the same, *viz.* Aristotelian recollection. In particular, we have seen that Albert the Great noted, both in the paraphrase of the *De memoria* and in the *Summa de homine*, that the previous thinkers used either *reminiscentia* or *recordatio* (or sometimes even *rememoratio*) to signify recollection.<sup>315</sup> Thus, Scotus' *recordatio* for "memory" is not completely fortunate in the Latin Aristotelian tradition, but this usage simply shows that he is moving away from the Aristotelian theory of memory towards the modern usage. Still, it must also be noticed that Scotus is intent on defending the Aristotelian foundation of his theory; he is just not in any sense constrained by it.

### Two Objects of Memory: Object Proper and Experience

The philosophically most interesting point in Scotus' theory is, however, his views on the objects of memory, and this part of the theory is the one which more than any other shows that the views on memory found in Scotus are closer to ours than are those of the previous Latin thinkers, not to mention those of Aristotle himself. Scotus claims that recall (*recordatio*) is not concerned with just any past object; for the person who is recalling something (*recordans*) must himself have experienced the object in the past.<sup>316</sup> Thus, recall can be defined as follows:<sup>317</sup>

Recordatio est cognitio actus alicuius praeteriti ipsius recordantis, et hoc in quantum praeteriti.

Recalling is cognition of some past act of the person recalling, and this in so far as it is cognised as past.

This definition is interesting in particular because of the requirement that the person must remember the object as belonging to an experience of *his* past. That is, recall has a double object (*duplex obiectum*): the thing that the subject experienced in the past and the experience

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<sup>315</sup> Albertus Magnus, *Liber de memoria*, ed. Jammy (1651a), 58a; Albertus Magnus, *Summa de homine* qu. 39, ed. Jammy (1651b), 191a.

<sup>316</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 195: "[A]ddo quod ille actus qui dicitur 'recordari' non est cuiuscumque praeteriti immediate, sed tantummodo alicuius actus qui infuit ipsi supposito recordanti ..." = "I add that this act, which is termed 'recalling', is not immediately about just any past object, but only about some act of the subject who is recalling."

<sup>317</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 195–196.

itself.<sup>318</sup> For instance, one does not properly speaking recall that a particular person sat in a chair yesterday without also recalling that one actually saw or otherwise learned that this person did so.<sup>319</sup>

This provides Scotus with a far more flexible theory of memory than most of the theories that have been examined above. Particularly interesting is Scotus' claim that pastness is not necessarily required of both object and experience.<sup>320</sup> According to him, the sensitive memory (or recall) demands that both object and act are recalled as past, but intellectual memory does not. For instance, when one recalls that a triangle has three angles equal to two right angles,<sup>321</sup> the object itself is not of the past, since it is always the same and not determined by its particular mode of being (*semper uniformiter se habens*) when it was originally thought or learned. Only the original *act* of thinking or learning can rightly be considered as belonging to the past. Therefore, if one remembers (or recalls) this act along with the object ("a triangle has three angles equal to two right angles"), then it is right to call it recalling (*recordatio*). But if one does not recall one's own original learning or thinking about the object, then one does not properly speaking remember the object but knows it, rethinks it or relearns it. This theory goes remarkably far towards a modern theory of recollective (or episodic or personal) memory.

### Two Kinds of Memory: Sensitive and Intellectual

As regards the different kinds of memory, it comes as no surprise that Scotus makes a clear distinction between memory in the sensing part of the soul and memory in the thinking part of the soul. In fact, this distinction is the backbone of the entire *quaestio*.<sup>322</sup>

For our purpose, the distinction, which we have already seen in the works of many Latin thinkers, is perhaps especially interesting in

<sup>318</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 196, 203–204.

<sup>319</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 195.

<sup>320</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 203–204.

<sup>321</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 204. See also Arist., *Mem.* 449b20 with my textual notes (*ad loc.*).

<sup>322</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 194: "Circa istam quaestionem primo inquirendum est an memoria proprie dicta (cuius scilicet est recordari praeteriti) sit in parte sensitiva; secundo an in parte intellectiva." = "As regards this question, we must first examine whether memory properly speaking (that is, recalling something from the past) is found in the sensing part [of the soul]; secondly, whether it is found in the thinking part [of the soul]."

Scotus' work, because he explicitly tries to defend the statements of the Aristotelian treatise, while he still upholds an intellectual memory. This he does with the use of his double object theory. For Aristotle must simply be interpreted as speaking about the sensitive memory, because this is basic in the sense that intellectual memory demands the existence also of sensitive memory, but the latter does not require the former, and whereas both objects of sensitive memory are always of the past, this is not so in intellectual memory.<sup>323</sup> Thus, Aristotle is justified, Scotus might say, in treating memory as belonging to the sensing part of the soul; and furthermore Scotus, along with other medieval thinkers, did believe that Aristotle also had the concept of intellectual memory.<sup>324</sup> However, contrary to his immediate predecessors, Scotus had a theory that could explain why the *De memoria* is primarily (if not exclusively) concerned with memory as belonging to the sensing part of the soul.

## Conclusion

Even though much has been left out in the preceding sketch of Scotus's treatment,<sup>325</sup> I hope it is clear that the use of the term "memory" is, in some crucial respects, rather close to the use that is found in philosophers and psychologists of the 20th and 21st centuries. The theory of a double object of memory, which introduces the remembering person into the conceptual framework, is a big step towards a modern, heterogeneous concept of memory.<sup>326</sup> And the sensitive memory and the intellectual memory are no longer (as in, e.g., Augustine) two distinct and separated capacities, but their relationship is stressed, in particular the dependence of the intellectual on the sensitive.

It will take more work to establish precisely in which parts of the theory Scotus is introducing novel features, and in which parts he based his work completely on his predecessors. Suffice it here to say that the thinkers of the 12th and 13th century who have been examined

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<sup>323</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 203–206.

<sup>324</sup> Johannes Duns Scotus, *Ordinatio* IV.45.3, ed. Wolter & Adams (1993), 201.

<sup>325</sup> Most notably, perhaps, I have not attempted any treatment of his views on intuitive cognition, which includes, among other features, intellectual cognition of sense-objects. On the theory, cf. Wolter (1990) 98–122; Wolter & Adams (1993) 175–191.

<sup>326</sup> A step, which Annas (1992a) thinks (wrongly, I believe) is found already in Aristotle (cf. Essay 1, the subsection "Julia Annas' View" in the section "The Non-Existence of Memory Acts in Aristotle").

above do not seem to care much about the remembering person when establishing their theories of memory; their terminology, as regards memory words, is generally more "Aristotelian" than Scotus', and their distinctions between sensitive and intellectual memory are much less articulated than Scotus' and most often no attempt to combine them is made. Scotus' theory is not a modern theory, but it is a natural part of the chain of theories extending from Aristotle to the 21st century.

### *General Conclusion*

Still at the initial stages of her work, *The Book of Memory: A Study of Memory in Medieval Culture*, Mary Carruthers makes the following remark about the history of views on memory:<sup>327</sup>

The idea that the memory stores, sorts, and retrieves material through the use of some kind of mental image was not attacked until the eighteenth century.

I do not want to contest the claim that images were generally seen as essential to internal (mental) processes, but I hope to have shown in the present essay and in the preceding one that the concept of memory, from Aristotle to the 21st century, is far more complicated than Carruthers' statement indicates. In fact, what Carruthers describes as the historical concept of memory, is rather a modern concept of memory, inspired perhaps by the tradition, but the general modern view is much less based on philosophical thought than both the ancient and the medieval theories.<sup>328</sup>

Aristotle's writings became dominating in the Latin West, but they were difficult to understand, and sometimes the original Greek 4th century B.C. theories were not easily applied to the 12th and 13th centuries A.D. thoughts of the Latin schoolmen. They already had a number of sources as regards memory, not to mention an ordinary usage of the term *memoria*, and therefore it is not surprising that Aristotle's *De memoria* was interpreted within a framework of memory that was much broader than the Aristotelian theory itself justified; for exactly the same thing happens when scholars of the 20th and 21st centuries interpret this intriguing short treatise. And here it must also be noticed that

<sup>327</sup> Carruthers (1990) 17.

<sup>328</sup> For the modern parallel, cf. e.g. Engel (1999) 5-7.



Sorabji's claim that *μνημονεύειν* and *μηνῆσθαι* are synonymous terms that signify "to remember" has a parallel in the Latin medieval translations, which translate *μηνῆσθαι* sometimes into *memorari* and sometimes into *reminisci*. Since they were not able to read the Greek original, the Latins had a major disadvantage right from the start, as far as an understanding of Aristotle is concerned. Still, judging from the writings of such major thinkers as Albert the Great and Thomas Aquinas, it seems that they did actually grasp the theory that was found in the treatise, but since that proved to be a somewhat narrow theory, they tried hard to make the Aristotelian evidence accord with the general views of their times. They were not always successful (as I hope this essay has made clear), but they certainly tried.

Perhaps I might even venture the conclusion that Aristotle was *not* in fact, despite appearances, the major influence on theories of memory in the Latin West; ordinary linguistic usage and well established traditions could not be eliminated by a theory like Aristotle's, which did not cover the required conceptual territory as did, for instance, the theories of Avicenna and Averroes. And two further reasons for this might be the following.

Memory is an important faculty of human beings and animals. However, at least for many of the Latin medieval thinkers, the status of memory was, I think, somewhat ambiguous. On the one hand, its importance was recognised due to the simple fact that Aristotle treats memory in a specific work devoted to this particular subject, and its position in the Aristotelian theory of obtaining universals,<sup>329</sup> accepted by the Latin schoolmen, also underlined that a clear and coherent understanding of memory is a serious matter. On the other hand, memory was always treated in the shadow of discussions of mind and intellect, which were considered somewhat more important. Peter of Auvergne is, I think, a particularly good example of this, since he is very much at his best when the Aristotelian text provides him with an opportunity to discuss topics that involve mind and intellect. Quite a few of his other *quaestiones* on memory-related matters may justly be considered uninspired or even trivial. Perhaps, then, the Latin thinkers were rarely inspired to take a closer look upon their conception of memory, but usually dispatched the discussion quickly and in accordance with tradition, in order to move on to more important matters.

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<sup>329</sup> *APo.* II.19; *Metaph.* I.1.

In this connection, it should be noted that one passage in Aristotle's *De memoria* actually provides a perfect opportunity to discuss the intellect.<sup>330</sup>

The second and most important reason is religious. Only in a religious context did memory become of prime importance, since the soul must still remember something from the earthly life after it has been separated from the body by death; otherwise it would not understand why it should eventually be forgiven or punished by God. Scotus at the beginning of the 14th century made this problem the starting point of a novel theory of memory. However, a 13th century attitude is illustrated by Aquinas: the definition of memory is the task of philosophy, not theology, and in his literal commentary on the *De memoria* Aquinas expounds at great length how memory belongs to the sensing part of the soul (regardless whether one believed that the soul was constituted by a single or by multiple forms). Nevertheless, in the *Summa theologiae* Aquinas states that the intellect does have a capacity for memory, and in this he was followed by all thinkers with religious commitments, despite the fact that this view is, apparently, contrary to Aristotle. Since this appears to be a true clash between philosophy and theology, it would have been very interesting to possess commentaries and *quaestiones* on the *De memoria* written by some of the more radical Aristotelian thinkers of the 13th century, such as Boethius of Dacia or Siger of Brabant, but none has survived. Perhaps they did not provide new material to the discussion, but it is notable that a thinker of Aquinas' stature did not manage to make the religious views of his *Summa theologiae* compatible with the views set forth in his commentary on the *De memoria*; at least, he did not show their compatibility, and that is noteworthy, since Aquinas thought that proper results of philosophy and theology cannot be contrary to each other.<sup>331</sup> Peter of Auvergne, using the more easily handled vehicle of *quaestiones*, could state that there are two kinds of memory: one in the intellect and one in the sensitive soul. However, he did not try to elaborate substantially on their relationship, their likenesses or their differences.

Thus, there are many reasons why the medieval theories of memory were bound to look different from Aristotle's. Still, Scotus is the only philosopher among those that I have examined in this essay who takes

<sup>330</sup> *Mem.* 449b30–450a25.

<sup>331</sup> See e.g. Thomas Aquinas, *Super Boethium De trinitate* II.3, editio Leonina (1992, vol. L), 97a–100b.

a giant leap towards a modern theory of memory. The remaining theories are better viewed as theories that are integrated in a thoroughly Peripatetic framework, even if the concept of memory itself always caused the interpreters some difficulties.

## CHAPTER FIVE

### TEXTUAL NOTES ON THE *DE MEMORIA*

449b4. Περί μνήμης καὶ τοῦ μνημονεύειν ... The archetypal manuscript reading is the one here presented. But this leaves the *De memoria* the only text of the *Parva naturalia* not beginning with a connective particle. It would perhaps be better to follow C<sup>e</sup>Mi in including the last line of what is traditionally taken to be the text of the *De sensu* as the beginning of *De memoria*. Alternatively, one could simply read Περί <δέ> at the beginning of the *De memoria* (with mvZ<sup>a</sup>).

449b9. ... τὰ μνημονευτά. The article is omitted in β, but all editors rightly adopt it, focusing on the objects of memory, in accordance with the method that was proposed in the *De anima* (cf. *An.* I.1 & II.4).

449b17. ... θεωρῶν καὶ ἐννοῶν. Since, as shown by the following sentence, this phrase is supposed to parallel (with an example of knowledge) the former example of perception, modern editors have preferred the reading of α (ὅτε θεωρῶν τυγχάνει καὶ ἐννοῶν), which *prima facie* provides a more exact parallel. But β, omitting ὅτε and τυγχάνει and writing νοῶν for ἐννοῶν, is actually an equally exact parallel, understanding οὐδείς ἂν φαίη μνημονεύειν as the basis; ὅτε and τυγχάνει are both likely interpretative insertions. Thus, I believe the reading of β to be superior, although I accept α's ἐννοῶν instead of νοῶν. Even some α manuscripts have been corrupted into νοῶν.

449b19. ... τῶν ἔργων ... This was most likely the reading of β, but α and U read τῶν ἐνεργειῶν, which may perhaps then be said to have slightly greater authority. It seems, therefore, that one of the two readings is a gloss on the other, and I believe that τῶν ἐνεργειῶν is more likely to be so. One might initially interpret τῶν ἔργων as “the [external] objects” (which may actually be the correct interpretation), but the gloss indicates that some commentator wanted the phrase to be taken in the sense of the exercising of the relevant faculties, in accordance with the distinction that Aristotle makes in *EE.* 1219a13–18.

449b20. ... οὕτω μένεται [τὰς τοῦ τριγώνου ὅτι δύο ὁρθαῖς ἴσαι] ... Freudenthal's and Ross' omission of τὰς τοῦ τριγώνου ὅτι δύο ὁρθαῖς ἴσαι is, I believe, correct. Annas (1992a) 301n9 calls the position of the phrase awkward but believes that it is arbitrary simply to omit it, and Siwek retains it. However, in the position given by the manuscripts the phrase is not only awkward but very difficult to explain, since an example given here would have to include both epistemic and perceptual examples; this phrase only includes the former. Furthermore, the corruption is easily explained, since this is one of Aristotle's favourite examples elsewhere in the *Corpus Aristotelicum* (e.g. *APo.* 71a20–21; further examples in Bonitz (1870) 770b, s.v. τριγώνον), and ancient and Byzantine commentators will have known this. Thus, in the present instance the phrase was originally inserted in the margin or as an interlinear gloss to explain τὸ μὲν ὅτι ἔμαθεν ἢ ἐθεώρησεν but mistakenly crept into the text. Gohlke suggested reading the sentence after τὸ θεωρούμενον in l. 17, which is certainly better than the transmitted variant, but I believe that Freudenthal was right in excising the text.

449b23. ... ἤκουσεν ... Freudenthal suspected this word to be an intrusion, and it does read somewhat strangely in the sentence, followed by the two general verbs ἥσθετο and ἐνόησεν. But Aristotle is not being very careful here, and ἥσθετο may well be meant as broadening the perspective to perception generally.

450a13. ... τοῦ νοῦ μὲν ... The archetypal reading seems to have been τοῦ νοουμένου, which some copyists (e.g. the copyist of X) took as meaning τοῦ νοητοῦ. But this reading cannot be correct. We need (1) something to correspond to τοῦ πρώτου αἰσθητικοῦ in the following, parallel sentence, and (2) it would be preferable if this was also signaled by the particle μὲν. Thus, the reading of C<sup>o</sup>Mi makes perfect sense and should, in my view, be adopted. This does not, however, provide the reading with manuscript authority, since these manuscripts descend from E; the reading is the result of emendation. The reading of P (τοῦ νοητικοῦ) is also acceptable, and it is probably a scribal emendation based on the corresponding αἰσθητικοῦ. Zeller proposed νοοῦντος or νοῦ, Bywater proposed διανοουμένου. Brentano followed another line of thought and wrote τοῦ πρώτου αἰσθητοῦ instead of τοῦ πρώτου αἰσθητικοῦ.

450a16–19. εἰ δὲ—ἔχειν. The text is disputed. I believe, however, that the manuscript reading should be retained.

The emendations of θνητῶν proposed by Rassow (θηρίων) followed by Biehl, and by Förster (ἀνοήτων) followed by Ross, are unlikely since, as stressed e.g. by Sorabji (1972: 79), they render the doubt or (better) slight hesitation expressed by ἴσως incomprehensible; for obviously no animal would be capable of remembering, if memory belonged to a thinking part. Furthermore, θνητῶν is by far the *lectio difficilior*, as shown by the frequent comments found in the manuscripts on this particular word.

I propose to retain θνητῶν as a term comprising “every mortal living being” and read the argument as follows: Aristotle has just said (Il. 12–14) that memory is essentially connected with sensation, and only accidentally with νοῦς. As proof he adds that memory is found not only in animals possessing the ability to think (νοῦς in a broad sense, comprising e.g. δόξα and φρόνησις) but also in some animals without this ability. But let us assume, he says, for the sake of argument, that memory is one of the “thinking parts (of the soul)” (τῶν νοητικῶν τιμορίων). Then it follows that a lot of animals (which are demonstrably capable of remembering) would not possess memory (in fact, he says in the parenthesis, it is doubtful if any mortal being would possess memory since we would first have to determine whether this particular thinking part was human or superhuman). Even as it is now, it is not all animals that possess memory, since they do not all have perception of time, and even fewer would possess it, if it were a νοητικὸν μόριον.

450a30. ...[τὸ πάθος] ... These words are very awkward in the context (= the thing that τοιοῦτον τὸ γινόμενον must be conceived as, namely, “as a sort of picture”), and I think that Ross was right (*pace* Sorabji et al.) to delete them. Ross (1955: 238) explained the corruption saying that it “is almost certainly an intruder, suggested by τοῦ πάθους in a26.” More likely, or at least cooperatively, τὸ πάθος was introduced deliberately as a gloss to explain either the reference of οὗ or the meaning of ἔστις.

450b8. ... καὶ οἱ λίαν βραδεῖς ... The reading of β (and of some of the α manuscripts) is καὶ βραδεῖς, but the article is preferable when making clear distinctions. This second λίαν may, however, be redundant.

450b14. ... τοῦτου ... This is the reading of  $\zeta$ . The archetypal reading was apparently τοῦτο, but manuscript authority is not crucial in deciding between τοῦτο and τοῦτου. Ross chose τοῦτο, but the term is probably dependent on αἰσθανόμενοι, not μνημονεύομεν, and in this passage Aristotle carefully uses the genitive when the word is dependent on αἰσθάνεσθαι and the accusative when it is the object of μνημονεύειν. Thus, I have accepted the reading of  $\zeta$ .

450b16. ... ἡ τοῦτου [αὐτοῦ] αἴσθησις ... This is Freudenthal's emendation adopted also by Ross. The manuscripts are not in agreement, but the only unsolvable problem concerns the word-order. A number of  $\beta$  manuscripts have εἰ for ἡ, but this corruption is easily explained, both on paleographical and linguistic grounds. Thus,  $\beta$  has the reading ἡ τοῦτου αὐτοῦ αἴσθησις, while  $\alpha$  has τοῦτου αὐτοῦ ἡ αἴσθησις.  $\beta$  has been followed concerning word-order. However, αὐτοῦ has been excised on grounds of paleography as well as meaning. The scribe was probably influenced by the phrasing in the following line, but this phrasing loses its force and distinctive power (the thing itself contra the image in the soul), if it was already applied to the term in the present sentence.

450b20. ... συμβαίνει ... This is the reading of all manuscripts. Ross conjectures συμβαίνειν, but this does not seem to be an improvement. On the contrary, I find the manuscript reading much more to the point: "Surely, this is not only possible but actually happens."

450b22. ... τοῦτ' ἐστὶν ἄμφω ... This is the reading of  $\alpha$ , and it is the *lectio difficilior* as shown also by the corruption in C<sup>6</sup>Mi (reading ταῦτ'). The equally well-attested αὐτό ἐστὶν ἄμφω produces unpleasant—or even bad—Greek.

450b25. ... [φάντασμα]. Freudenthal is, in my opinion, right in excising φάντασμα. Not only is the word redundant, since the *definiendum* is τὸ ἐν τῇ ψυχῇ φάντασμα, but the ἄλλον is not to be explained before the following sentence. φάντασμα is almost certainly a gloss attempting to explain ἄλλον. And thirdly, if staying in the explanatory vein, one should supply εἰκόν, not φάντασμα.

450b29–31. ἂν δ'—Κορίσκου... This passage is somewhat difficult concerning grammar and punctuation; the sense of the passage seems relatively clear.

In the reading here adopted I generally follow  $\beta$ . Earlier editors (with Ross as the exception) generally followed  $\alpha$  and read: ἂν δ' ἢ ἄλλου, ὥσπερ ἐν τῇ γραφῇ ὡς εἰκόνα θεωρεῖ, καὶ μὴ ἑωρακῶς τὸν Κορίσκον ὡς Κορίσκου ...

First, it is obvious from the manuscripts that θεωρεῖ caused the scribes some difficulty. Thus, quite a few write θεωρῇ, and I believe that the omitted καὶ before ὥσπερ also happened because of θεωρεῖ. Therefore, the *lectio difficilior* of  $\beta$  is preferable. Siwek adopts ὡς Κορίσκον in l. 31 with extremely slight manuscript support, but that is a corruption caused by the preceding ὡς εἰκόνα.

451a5. ... διστάζομεν ἐνίστε· ὅτε δὲ συμβαίνει ... This is the reading of  $\beta$ , but most editors prefer the reading of  $\alpha$  omitting ἐνίστε after διστάζομεν, probably considering it a gloss. (The manuscripts of  $\beta$  disagree among themselves, but it seems reasonably simple to extract the original reading of  $\beta$ .) However, the reading of  $\beta$  cannot really be explained as redundant, since διστάζομεν is in an independent clause that is parallel with the ἴσμεν-clause. The omission of διστάζομεν in C<sup>o</sup>Mi shows that it was easy to take the two εἰ-clauses as being dependent on ἴσμεν, which makes διστάζομεν—and so also the second ἐνίστε—irrelevant. The following ὅτε will also have aided the omission (the process can, in fact, be seen in the admittedly very corrupt Z<sup>a</sup> reading: διστάζομεν ἐνίστε δὲ συμβαίνει).

451a8. ... ἐνίστε ... Again, the ἐνίστε is omitted by  $\alpha$ , the reading of which is generally accepted by modern editors. The reason for omitting it would be to consider it a gloss (it is found e.g. in Michael's commentary), but on the other hand the frequent use of the word in the surroundings may be responsible for the omission of the word in  $\alpha$ .

451a23. ... δ' ... Some confusion as to the choice between γὰρ and δ' has haunted modern editions. Bekker printed δὲ claiming (*e silentio*) the support of all manuscripts except L, and he was followed by Biehl (although, following Bussemaker, Biehl added E to the list of manuscripts reading γὰρ) and Mugnier (which is rather strange, since Mugnier has made collations himself). The fact is that N is the only manuscript reading δ', and thus the archetypal reading is sure to have been γὰρ, which is printed by Förster, Ross and Siwek. Seeing, however, that corruptions producing variant readings of γὰρ and δ' are common, the case should be decided with reference to the sense of the passage.



Only if superiority cannot be argued for any of the readings, should the manuscripts decide this case.

On the archetypal reading γάρ, the ὅταν-clause is an explanation supporting the fact stated in the clause οὐτ' ἐξ ἀρχῆς λαμβάνει (l. 23), and is parallel with οὐδεμία γὰρ προέγονεν (ll. 22–23). But it seems that Aristotle wants this second ὅταν-clause (ll. 23–24) to structurally parallel the preceding ὅταν-clause (ll. 21–23), and therefore δέ is the preferable connective.

451a23. ... ἐγγένηται ... This, the reading of α, seems more appropriate than the reading of β (γένηται). Aristotle is referring to the rise of ἔξεις or πάθη in the soul, which is shown also by the following sentence (which could, however, be considered the corrupting source).

451a25. ... ἐγγέγονε τῷ ... The reading of β is ἐγεγόνει ἐν τῷ, but ἐγεγόνει is difficult to explain. Like all other modern editions I adopt the reading of α.

451b1. ... ἀλλ' ... The word is omitted in β, but the inclusion of ἀλλ' is, if not absolutely necessary, at least preferable, as regards the Greek.

451b4. ... τὸ ... The article is omitted in β, but manuscript authority is not a deciding factor in this case, and Aristotle is introducing a separate capability. Thus, the article is preferable.

451b5–6. †τὸ δὲ μνημονεύειν συμβαίνει καὶ μνήμη ἀκολουθεῖ†. This sentence is awkward for at least two reasons: (1) the claim that memory follows upon recollection is not strictly speaking true on the Aristotelian theory (see the argument of Essay 1), and (2) on the archetypal reading καὶ μνήμη ἀκολουθεῖ is, apparently, mere repetition of τὸ δὲ μνημονεύειν συμβαίνει.

As regards no. 1, the phrase may exemplify careless language on Aristotle's part, but that is extraordinary in a passage concerned with making conceptual distinctions. Perhaps the phrase was originally part of a comment on the passage and therefore to be deleted.

As regards no. 2, καὶ μνήμη ἀκολουθεῖ should perhaps be deleted as a gloss on τὸ ... μνημονεύειν συμβαίνει (that is, if one does not follow the suggestion concerning problem no. 1 and deletes the entire phrase). For, as frequently illustrated in the commentators and in the manuscripts, μνημονεύειν was considered a difficult term that could

sometimes signify ἀναμνήσκεισθαι (cf. e.g. Mich. Ephes., *In mem.* 22.25–26 on 451b1, and this is also found as a gloss in X and m; the same understanding of μνημονεύειν is implicit in the conjectures found in m and in Ross' edition). A scribe, early in the tradition and with a better understanding of the terminology, may have tried to explain that μνημονεύειν means μνήμη in this place. Likewise, συμβαίνει is a broad and ambiguous term, but the intended meaning in this particular passage seems to be precisely the one conveyed by ἀκολουθεῖ. If this conjecture is not accepted, the καὶ must, I think, be taken as explicative.

451b11. ... ἐπειδὴ—τήνδε. This reading is a conflation of α and β and is also the reading of Bekker. In α only γενέσθαι is preserved, while this particular word does not seem to have been present in β. Certainly, the supplement found in β is a relevant contribution and cannot be construed as a mere gloss on a difficult phrase.

451b12. ... ἐκείνην ... This is the reading of θ, the slightly more authoritative reading being ἐκείνη. But the parallel ἐκείνην ... τήνδε is, in my opinion, convincing. The corruption into ἐκείνη may be caused by the fact that we need a new subject in the sentence as compared with the previous statement, or possibly it was inspired by the wording of 451b18 and 451b24.

451b13. ... ἀλλ' ἔθει ... These words (omitted in P) may well be a gloss on μὴ ἔξ ἀνάγκης. The ones that are ἔξ ἀνάγκης were not similarly explained when introduced above, and Aristotle is focusing explicitly on the antithesis: ἔξ ἀνάγκης contra μὴ ἔξ ἀνάγκης and the result. If the words are a gloss, they may have been culled from 451b28. However, lacking manuscript authority, I have hesitantly retained the reading.

451b14–16. συμβαίνει—πολλάκις. The reading adopted is the same as the one approved by Beare and adopted by Ross, partly following the emendations of Freudenthal. It seems to me (*pace* Siwek) that the manuscript reading cannot stand: ἐνίους/ἐτέρους (ll. 14–15) and ἔνια / ἔτερα (ll. 15–16) seem to be in strong opposition to each other. Freudenthal's emendation of ἐνίους/ἐτέρους into ἐνίας/ἐτέρας (*scil.* κινήσεις) is a simple and plausible solution, connecting the passage both with the preceding and the following passages. Alternatively, but inferior to Freudenthal's emendation, we may follow the variant readings found in U: ἔνια/ἔτερα for ἐνίους/ἐτέρους. Siwek does not record this variant

reading, and he prints the text of the manuscripts, but his explanation (*eiusmodi negligentiae stylisticae saepius apud Aristotelem occurrunt*) is not valid when a simple solution like Freudenthal's is at hand.

Michael of Ephesos, following the manuscripts, does not explicitly try to connect the two sentences, but he may show some awareness of the problem in a somewhat desperate suggestion (*In mem.* 25.28–29): ἢ τὸ “ἐνίους” ἐπὶ τῶν ἐν τῇ ψυχῇ τύπων εἴρηται· τινὲς γὰρ τῶν τύπων γίνονται εὐμνημόνευτοι, τινὲς δ’ οὐ.

451b20. διὰ τοῦτο γίνεται ἡ ἀνάμνησις. This sentence sounds suspiciously like a gloss and should perhaps be removed from the text. Lacking any manuscript evidence to support the suggestion, I have, however, adopted the phrase in the text.

451b27–28. †λέγει—ἀναμνησθεῖς†. Ross is the only modern editor to adopt Freudenthal's suggestion and delete this passage, but his judgment on the passage is harsh (“This sentence is obviously quite ungrammatical, ...”). I partly agree. The passage, as it is found in the various manuscripts, cannot stand. Other modern editors have adopted the reading of α: λέγω δὲ ..., but I believe this to be a scribal attempt to give at least some sense to an otherwise incomprehensible passage by “emending” the corrupt reading into something that looks like a familiar Aristotelian idiom. And still, the passage thus printed is, if not “obviously quite ungrammatical”, then at least not obviously meaningful. Thus, I am convinced that the oldest reading is the reading of β, but this reading does not make sense. It may, as Freudenthal and Ross think, have been a gloss, but it may also have been Aristotle's own clarification of e.g. ὁ αὐτός ἐστι τρόπος πῶς. Even though I am inclined to agree with Freudenthal and Ross, I think it best to insert the *obeli*.

451b27. ... ὥς ... This reading of β is not accepted by any modern editor. They all follow α printing ὅτι. But δῆλον ... ὥς, even if more unusual, is also found elsewhere in Aristotle (cf. H. Bonitz, *Index Aristotelicus*, s.v. δῆλος, 173b). It is even the accepted archetypal reading in 451b12, and is furthermore the less likely corruption in the present passage.

452a8. ... ζητεῖν ... It is possible that we should read ζητῶν with α. The presence of δύναται was always likely to corrupt surrounding verbal forms into infinitives, as shown also in a few manuscripts having εὐρίσκειν for εὐρίσκει immediately following.

452a17. ... καθόλου ... In β we read τὸ καθόλου, but this cannot stand, since Aristotle is focusing on τὸ μέσον as the subject. τὸ καθόλου would confuse the grammatical structure of the sentence.

452a19–24. εἰ γὰρ—ἀεί. This passage is very disputed, and the manuscripts are in complete disagreement.

The essential question is: Which of the letters is the middle point? Ross, adopting the argument (though not the solution) of Smyly, proposed to insert I following Θ, since this would produce a middle term, namely E. However, this solution calls for extensive emendation of the entire passage, and the manuscript readings must be examined carefully before adopting such rather drastic measures. Most often it is possible to establish the archetypal reading, and in such cases alternative manuscript readings do not have more authority than scholarly emendation. Even though the archetypal reading may be said to hold some authority, it is clear that the manuscripts are confused and should not be trusted when the sense produced is not satisfactory.

Arguably, if τὸ μέσον is taken absolutely to apply to one letter in the sequence, interpretation is difficult. Michael of Ephesos and probably also the manuscripts (although the confusion in these is immense) took E as the middle point, but the explanation provided by Michael (29.24–30.17) is unsatisfactory. On his view, it seems that we must simply arbitrarily decide that E is the middle point of the series, but in this case the list of eight letters is superfluous and it is impossible to provide a satisfactory interpretation of Aristotle's following statements.

Fortunately, there is a much more plausible solution. Richard Sorabji (1972: 31–34) has argued that Aristotle's recommendation "concerns not the middle of the whole series, but the middle of each triplet, EZH, BΓΔ, etc." This is, I believe, the correct solution, and even though an editor must still emend the archetypal readings of the manuscripts in quite a few passages, the interpretation makes much better sense than the ones proposed by Michael (with the manuscripts) and by Ross. Sorabji states five convincing arguments in favour of his thesis, but he omits what I consider perhaps the most important point: A μέσον will for Aristotle belong naturally to a triplet, not to single larger series of entities. The use of τὸ μέσον in the theory of the syllogism is the obvious case in point, and Aristotle will occasionally describe the relation between *maior*, *middle* and *minor* as the relation between τὸ πρῶτον, τὸ μέσον and τὸ τρίτον (cf. e.g. *APo.* 75a35–37; and see also *Metaph.* 994a11–19). That Aristotle may in fact (at least to some extent)

have logical theory in mind is indicated partly by his use of letters, and partly by the words in 453a10, where τὸ ἀναμνησέσθαι is defined as συλλογισμός τις. The structure of an illustration of the present passage, found with only slight variations in several manuscripts (LUO<sup>4</sup>VmNbv), may also indicate this triplet structure, although due to the confusion concerning Aristotle's point, the letters have been wrongly inserted in the illustration (see the illustration below). Thus, this conception of τὸ μέσον must guide the editor of the text.

The text here adopted is the same as the one adopted by Sorabji. Aristotle's point, as the text stands, is that you begin by recalling the end term (Θ). (Even though this reading is not found in any manuscript, ϑ appears to have had it as a variant reading, and, more interestingly, although the manuscript illustrations do not indicate Θ as the end term, we find in L a heading of the illustration reading ἀπὸ τοῦ Θ.) If one does not recall what one wants to recall, one moves to the middle point of the nearest triplet not comprising Θ, the middle point of which is Z. (Z is not found in the manuscripts, but is introduced by conjecture. It does, however, derive support from the reading of l. 26, if the text of that passage is sound. In this Z is taken as a particularly familiar letter/image.) From this middle point one has two options: one can move back to H (thus trying to recollect it from another angle than from Θ; H is not attested in the manuscripts, which differ between Δ and A) or one can move to E. If one seeks neither H nor E, one should move to Γ, from where one can move to Δ or to B. And again, if we are still not satisfied in our search, we should move to A, from which we can, if necessary, proceed to B.

In this way Aristotle has made us go through all eight letters. The slight problem with this interpretation, and the only element in the interpretation that makes me retain some minor doubts, is that some letters are attacked from different angles (HB), while others are only attacked from one angle (ΔE). However, the reason for this apparent discrepancy is the difference between AΘ, which are extreme points, and ΓZ, which are the middle points, that is, the ἀρχαί proper of the investigations. From these it must be possible to move in both directions.

452a26. ... οὖν ... The β manuscripts generally read οὖν μὴ (though μὴ may have been omitted in θ), but there is no opposition between διὰ παλαιοῦ and συνηθέστερον in the following. When you are moving through old images, searching for something, you will always be likely

to go towards the more ingrown images. Thus, the present statement illustrates perfectly the fact stated in the preceding sentence.

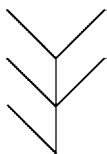


Illustration found in LUO<sup>d</sup>VmNbv  
(letters are inserted, in wrong order, at the  
end of branches and at the intersections)

452a28. ... ἃ πολλάκις ἐννοοῦμεν ... This reading, consisting of both α and β readings, has (rightly, I think) been adopted by Bekker and later editors. The ἐννοοῦμεθα of β has probably been caused by ἀναμνησκόμεθα.

452a30. ... συνηθεία. This is Cook Wilson's emendation. The manuscripts as well as modern editors have ἐνεργεία. Interpreters lead by Michael of Ephesos have generally taken ἐνεργεία as meaning ἔθει, since otherwise they were not able to make sense of the passage, but modern editors believing in this interpretation really must emend the passage. G.R.T. Ross, however, foreshadowed another interpretation found in Siwek's edition. Siwek translates: "sicut enim in natura unum [invariabiliter] sequitur aliud, ita quoque [fit] in exercitio actus [in homine]", saying that otherwise the sentence is mere repetition. But (1) I find Siwek's interpretation of ἐνεργεία as "in exercitio actus in homine" doubtful and irrelevant, and (2) the sentence is not mere repetition even on the usual interpretation. Aristotle is making the point that the natural order of images (that is, the causal and/or chronological order) is not the only order; habit may form its own order independent of time and causation. The first type of order is the more natural, but, as Aristotle proceeds to say, if something is repeated a number of times, it will eventually become a natural order. Ross believes that ἐνεργεία can stand, but he offers no justification or interpretation.

452b2. ... γε ... This word is omitted in β, but this is inferior to the reading of α. A small particle is always in danger of being omitted by a scribe, especially in a case such as this, where the relevance of

the particle may not have been entirely clear to him. However, as I have argued in the preceding comment, ἔθος can become φύσει, but, as Aristotle here explains, it is not exactly the same nature as the truly natural. This meaning is perfectly conveyed by γε.

452b4. ... ἀφέλκη <τι> ... The manuscript reading ἀφέλκη cannot stand. The reading here adopted is Beare's emendation that is also adopted by Ross and Siwek. Christ's emendation (ἀφέλκῃται) is also possible and may even accord better with κινήθῃναι in l. 3.

452b11–12. ... τῇ ἀνάλογον κινήσει. This is the reading of α, while β has τινα λόγον κινήσει. The latter is difficult concerning grammar and meaning, and the corruption is easily explained as a mistake on paleographical grounds. Thus, the reading of α has been adopted with all modern editors.

452b16. ... ἄλλο ... The β tradition has ἀλλ', but I can make no sense of this, and the reading of α has been adopted. This is in accordance with all modern editors.

452b17–22. †ὥσπερ—πρὸς ΒΑ†. Ross and Beare each arrived independently at approximately the same interpretation of this passage (for the details, see Ross 1955: 249–252). Recently Sisko (1997) has proposed another interpretation. All interpretations are highly conjectural and uncertain, and it seems to me that the passage cannot at present be emended with satisfactory precision. Thus, I print what I believe to be the archetypal readings and insert the *obeli*.

453a1. ... ὁδήποτε ἐποίησεν ... ὁδήποτε was the reading of α, while C<sup>6</sup>Mi are the only α manuscripts to read ἐποίησεν. But ἐποίησεν is also found in β. The reading of β in general is ὅτι μέντοι ποτὲ ἐποίησεν. This has not been accepted by any modern editor and rightly so, since the more uncommon ὁδήποτε was always likely to be corrupted. Furthermore, the β reading may be a gloss, in part inspired by 453a3.

453a3–4. ... <τὸ> πότε—μέτρω. This is my emendation. The obvious redundancy of the confused manuscript readings have been dealt with in different ways by scribes and editors. One of the major problems is the τοῦτο, found in all manuscripts except C<sup>6</sup>Mi, which reading has

so bothered editors that they adopt the C<sup>c</sup>Mi-reading. This reading is, however, without any authority, and it seems likely that it is an attempt at emendation. But (1) it is redundant, and (2) it is unsatisfactory to have the parallels *πότε*—*τοῦ πότε*; in that case they should both have the article.

The passage can, however, be emended to produce both good meaning and grammar. The *τοῦτο* was originally followed by *τὸ ποσὸν* (as described e.g. in *APo.* 74a17–25 & 99a8–11, *χρόνοι* can be viewed essentially as quantities; see also *Mem.* 449b30–450a15), and the words should refer to *πότε* in the preceding clause; therefore this *πότε* needs the article *τὸ*. Some scribe saw that this was the reference of *τοῦτο*, and so he commented *πότε* or *τὸ πότε*, in the margin or above the line, and this phrase was accidentally inserted in the text. This had probably already happened in the *archetypus*, but the β tradition tried to ameliorate the text by reading *τῷ ποσῷ*, applying to *μέτρω*, instead of *τὸ ποσὸν*. It would be interesting to know the origin of the reading of S, in which the second *πότε* is omitted.

453a6. ... [μόνον] ... There is not really a time difference between memory and recollection as regards their area, that is, the past; and, furthermore, as the text stands, we would expect *ἀλλὰ καὶ ὅτι* or *ἀλλ' ὅτι καὶ*, not just *ἀλλ' ὅτι* in l. 7 (for a few parallel passages, cf. *APr.* 38a13–16; 45b36–38; *Top.* 106a3–8; 129b14–15; 155a28–30; *Phys.* 208b8–11; 233b15–19; *An.* 430b4–6; *HA.* 490b1–3). Michael of Ephesos (38.7–8), among others, is inspired by Plato (*Phlb.* 34b–c) and explains that recollection is the renewal of previous memory (*πρότερον γὰρ τῷ χρόνῳ μνήμη ἀναμνήσεως τῷ ἀνανέωσιν μνήμης εἶναι τὴν ἀνάμνησιν*), but this is wrong, since memory need not have preceded recollection (*Mem.* 451a18–b10). Siwek (1963) 167n105 makes a similar mistake. Amusingly, Thomas Aquinas, *Sententia de memoria*, editio Leonina (1985), 130b makes the contrary claim in saying that recollection is the *via ad memoriam* and therefore precedes memory.

The difference in time concerning perception, expectation and memory is the sort of difference that matters in an interpretation (449b10–15; 449b26–28), but no such difference exists between memory and recollection. Thus, I believe that *μόνον* has been wrongly inserted by an interpreter who thought, as e.g. Michael did, that there must be a distinction between memory and recollection in time. However, what Aristotle points out in this passage is simply that the immediately preceding passage concerned with time is not important in the relation



between memory and recollection; what is important in the demarcation of the two is, as explained in the following, that τὸ βουλευτικόν is required for recollection but not for memory. The word μόνον is a very regular gloss in manuscripts and frequently intrudes into the text (cf. e.g. *Sens.* 436a13; 441a21; 441b26). (Admittedly, *Mem.* 451a18–b10 also shows that time does play a role in the demarcation, since memory is not instantaneous like recollection, but this kind of difference is not anywhere near Aristotle’s concern in the immediately preceding or in the present passage.) For another reading and brief summaries of other interpretations, cf. King (2004) 141–142 (*ad* 453a6–9).

453a9. ... γνωριζομένων ... The reading of β (γνωρίζων) trivialises the passage, and the reading of α here adopted is, I think, superior. All modern editors adopt this reading, although G.R.T. Ross (1904: 284) comments that: “The reading of LSU γνωρίμων is perhaps a little smoother.”

453a14. ... τι ... The vagueness introduced by τι is appropriate in the context (cf. ἐν τοιούτῳ [*scil.* σωματικῷ] immediately following and l. 22), even though it was probably not the archetypal reading. Manuscript evidence is not, however, crucial in such a matter. There is some confusion in the extant manuscripts.

453a17. ... ἐπέχοντες ... Christ’s emendation is foreshadowed (though probably rather by accident than by conjecture) in N, and seems also to have been found in E *ante correcturam*. The general manuscript reading ἐπέχοντας was most likely caused by ἐπιχειροῦντας in the following line.

453a25. ... ἂν ἐπέλθῃ ... Ross preferred the reading of α (ἂν ἐπανέλθῃ), probably considering it the *lectio difficilior*. But (1) Aristotle has already used ἐπελθεῖν in 450b29 in a similar sense, and (2) the corruption in α could well have been caused by the preceding ἂν (cf. also 453a30).

453b4. ... <οἱ> ... This reading is found only in Z<sup>a</sup>, and it is certainly not the archetypal reading of the manuscripts. However, the groups of young and old must be marked as two distinct groups, as shown by the following οἱ μὲν—οἱ δὲ. The loss of an article is an easy manuscript mistake. For an almost exact parallel, accepted by all modern editors, cf. 450b8 with my textual note.

453b5–6. ... οἱ μὲν—πολλῇ ... This is the reading of β; in α an εἰσίν is appended to πολλῇ. But the statement is a brief parenthetical remark, and thus the omission is justified. Modern editors have usually printed εἰσίν and omitted the parenthesis.

453b11. ... τίν' αἰτίαν ... Modern editors (Mugnier, Ross and Siwek) have printed τίνας αἰτίας with α, but Bekker was right, I think, in preferring the singular found in β. The singular is in accordance with the similar phrase in the introduction to the work (449b4), and is meant as a general statement to the effect that he has now fully explained the cause of recollection. The corruption into the plural τίνας αἰτίας is easy to explain, since Aristotle has in fact made several distinctions within the concept of recollection.



## CHAPTER SIX

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- αἰσθάνεσθαι = sense (449b18,  
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αἴσθημα = sense impression  
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αἴσθησις = sensation (449b13,  
449b19, 449b24, 449b27,  
450a28, 450b16, 451b3), sense  
(450a19)  
αἴσθησις κοινή = common sense  
(450a10–11)  
αἰσθητικόν, τὸ = faculty of sense  
(453b2)  
αἰσθητικόν, τὸ πρῶτον = primary  
faculty of sense (450a11–12,  
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αἰσθητικὸς τόπος, ὁ = area  
concerned with sensation  
(453a24)  
αἰτία = reason (449b4, 450a7,  
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αἶτιον = reason (452a13, 452a25,  
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ἀμνήμων = have weak memory  
(450b6, 453b1, 453b5)  
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ἀναλαμβάνειν = recover (451a22,  
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ἀνάμνησις = recollection (451a21,  
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ἀναμνηστικός = good at recollecting  
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ἄνθρωπος = man (450a15–16, 453a9)  
ἀντικινεῖν = set up countermove-  
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ἀόριστος = indeterminate (450a6,  
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ἀπόστημα = interval (452b16–17)  
ἄπτειν = make real contact (450b11)  
ἀρχή = starting point (451b9, 452a1,  
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αὕξις = growth (450b7, 453b6)  
  
βουλευέσθαι = deliberate (453a14)  
βουλευτικόν, τὸ = faculty of  
deliberation (453a13)  
βραδύς = slow-witted (449b8,  
450b8)  
  
γενόμενον, τὸ = the past (449b14,  
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γνωρίζειν = cognise (449b14, 450a9–  
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γνώσις = cognition (450a12)  
γράφειν = draw (450a3)  
γραφὴ = inscription (450b16),  
picture (450b30)  
  
διαγράφειν = draw (a diagram)  
(450a2)  
διάνοια = thought (452b10, 453a17)  
δόξα = opinion (450a16)

δοξαστός = (something) one has  
opinion about (449b11)  
δύναμις = potential (452a10–11)

ἐθισθῆναι = to be familiar with  
(451b14)

ἔθος = habit (451b13, 451b28,  
452a28, 452b2)

εἰδέναι = know (451a3, 453a3)

εἶδος = form (452b15)

εἰκόν = representation (450b21–22,  
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451a15)

εἶναι, τὸ = being (450b22)

ἐλπίς = expectation (449b27)

ἐλπιστός = (something) one has  
expectation about (449b11,  
449b12)

ἐναντίος = opposite (451a8), contrary  
(451b19), the other way around  
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ἐνεργεῖν = actualise (449b22, 450a19,  
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ἐννοεῖν = think (about) (449b17,  
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ἐξ ἀρχῆς = for the first time (451a23,  
451b1), from the beginning  
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ἔξις = state of having (449b25,  
450a30, 451a23, 451a16, 451a27),  
having state (451b3)

ἐπαναμνησέσθαι = to repeatedly  
remind (451a12–13)

ἐπιζητεῖν = seek (452a16, 452a22,  
452a23)

ἐπίστασθαι = know (449b18), have  
knowledge (about) (451a29)

ἐπιστήμη = knowledge (449b19,  
451a27, 451b3), science (449b12)

ἔργον = action (449b19)

εὐθύπορεῖν = follow a straight  
course (453a25, 453b4)

εὐμαθής = to learn easily (449b8)

εὐμνημόνευτος = easily remembered  
(452a3)

εὕρισκειν = discover (451b8, 452a8)

ἐφεξῆς = (next in) the series (451b18,  
451b27, 452a2)

ζητεῖν = seek (451b22, 451b23,  
451b30, 452a8, 453a25)

ζήτησις = search (453a12, 453a15)

ζωγράφημα = picture (450a29–30)

ζῷον = animal (449b29, 450a15,  
450a18, 453a8, 453a9, 453b9),  
picture (450b21, 450b23, 450b32)

θεωρεῖν = contemplate (449b17,  
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451a1, 451a7, 451a8, 451a12,  
451a13), object of contemplation  
(449b17)

θεώρημα = contemplation (450b26)

θεωρία = contemplation (450b32)

θνητός = mortal creature (450a18)

καθ' αὐτό = essentially (450a14,  
450a24, 451a29), in itself (450b26,  
450b28, 451a14)

κατὰ συμβεβηκός = accidentally  
(450a13–14, 450a24–25, 451a28)

κινεῖν = move (451b12, 451b12–13,  
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452a2, 452a9, 452a11–12, 452b12,  
452b13, 452b23, 453a26, 453b2,  
453b5)

λαμβάνειν = acquire (451a23)

λήψις = (original) acquisition  
(451a21)

λόγος = discussion (450a9, 451a19),  
argument (453a29)

μάθημα = mathematical object  
(452a3)

μανθάνειν = learn (449b21, 451a21,  
451b7, 451b10, 452a5)

μαντική = divination (449b12–13)

μέγεθος = magnitude (450a9)

μελαγχολικός = melancholic  
(453a19)

μελέτη = exercise (451a12)

μέλλον, τὸ = the future (449b10,  
449b13–14, 449b27)

μέλος = tune (453a28)

μεμνησθαι = recall (449b20, 451b26,  
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453a2, 453a3)

μέσον, τὸ = the middle (452a17)

μνήμη = memory (449b4, 449b15,  
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451b1, 451b5, 451b16, 452b5,  
452b25, 452b26, 453a6, 453a7,  
453b8, 453b9)

μνημόνευμα = memory impression  
(450b27, 451a2)

μνημονευτόν, τὸ = object of memory  
(449b9, 450a24)

μνημονικός = good at remembering  
(449b6, 449b7, 453a5)

μνήμων = possess a good memory  
(450b9)

μόριον = part (449b5, 450a17,  
450a29, 451a16)

νανώδης = dwarfish (453a31–b1,  
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νοεῖν = think (449b23, 449b31,  
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νόημα = thought (450b29, 451a1)

νοητικός = thinking (450a16–17)

νοητόν, τὸ = object of thought  
(450a12–13)

νοῦς = mind (450a13)

ὅμοιος = similar (450b15, 451b19,  
452b12)

ὄνομα = name (452b5, 453a28)

ὄργη = anger (453a26)

ὀρίζειν = determinate (450a3,  
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πάθος = affection (449b5, 449b25,  
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451a28, 453a15, 453a23,  
453a28)

παρόμοιος = similar (452b5)

παρόν, τὸ = the present (449b13,  
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πάσχειν = experience (451a21–22,  
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453a11)

πίναξ = board (450b21)

ποσόν, τὸ = quantity (450a2–3,  
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453a4)

πράγμα = thing (450a26, 452a1–2,  
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προζητεῖν = to previously seek  
(451b28)

προσαιοσθάνεσθαι = to sense in  
addition (450a21)

σημεῖον = to be proved (453a16)

σολοικίζειν = to make a (verbal)  
mistake (452b5–6)

συλλογίζειν = deduce (453a11)

συλλογισμός = deduction (453a10,  
453a14)

σύνεγγυς = closely connected  
(451b20, 451b26)



- συνεχές, τὸ = continuity (450a8)  
 συνήθης = habitual (452a27)  
 συνήθεια = habit (452a30)  
 σχῆμα = figure (452b12)
- τάξις = order (452a3)  
 ταχύς = quick-witted (449b8,  
 450b8), quickly (452a14, 452a28)  
 τόπος = "place" (452a13)  
 τύπος = impression (450a31, 450b5,  
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- ὑπόληψις = conception (449b24)
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